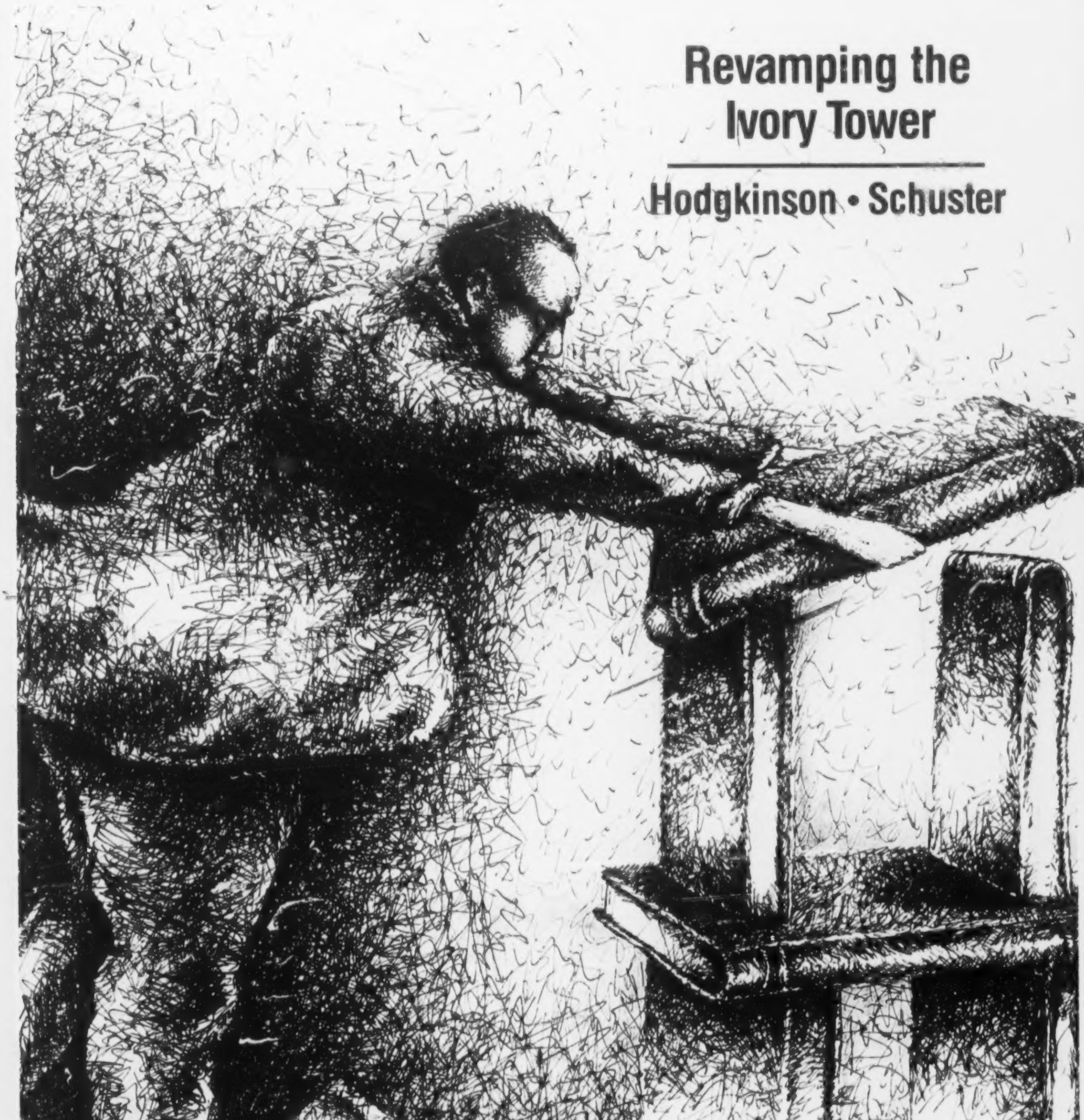
Nov. 1986 not filmed

A8680-1A

PHI DELTA
DECEMBER 1986

KAPPAN



Revamping the Ivory Tower

Hodgkinson • Schuster

Phi Delta December 1986 • Volume 68 • Number 4

KAPPAN

FEATURES

271 **Reform? Higher Education? Don't Be Absurd!,** *by Harold L. Hodgkinson*
275 **The Faculty Dilemma: A Short Course,** *by Jack H. Schuster*
283 **Smoothing the Transition from School to College,** *by Ernest L. Boyer*
288 **The Ideal Professor of Education,** *by Richard Wisniewski*

293 **On Sheep and Goats and School Reform,** *by Roland S. Barth*
297 **Success for *All* Students,** *by Christine E. Sleeter and Carl A. Grant*
300 **The Myth of the 'Great Principal': Questions of School Management and Instructional Leadership,** *by Sharon F. Rallis and Martha C. Highsmith*
305 **School-Based Management: The Next Needed Education Reform,** *by James W. Guthrie*

310 **The Reform of National Accreditation,** *by Donna M. Gollnick and Richard C. Kunkel*
315 **Four Educators Comment on the Redesign of NCATE,** *by Doyle Watts*

319 **Sex and School Reform,** *by Larry Cuban*
322 **Confessions of an English Poetry Eater,** *by John Atherton*

KAPPAN Special Report: States Move Reform Closer to Reality, *by Chris Pipho*

DEPARTMENTS

266 **THE EDITOR'S PAGE,** One in a Million
267 **WASHINGTON REPORT,** *by Anne C. Lewis*
269 **STATELINE,** *by Chris Pipho*

325 **PAR,** Dropping Out, *by Deborah Burnett Strother*

329 **DE JURE,** Courts Foil Schools' Efforts to Detect Drugs, *by Thomas J. Flygare*
331 **PROTOTYPES,** Meeting Students' Need to Serve, *by Timothy B. Evers*
332 **BOOKS,** *Laurence D. Brown*
336 **NEWSNOTES**
338 **BACKTALK**

Cover Illustration: Kevin Pope

HIGHER EDUCATION

Smoothing the Transition from School To College

Students approach the college experience with high expectations, but their transition from high school to college is often fraught with pitfalls. We need creative new approaches that will smooth this transition, says Mr. Boyer.

BY ERNEST L. BOYER

STUDENTS GO TO college expecting something special. Only in America is a college decal displayed proudly on the rear window of the family car. The message: here's a family on the move. One high school student reflected this nation's almost touching faith in higher education when she said, "I think my main concern is that without a college education, I'll have slim chances in today's world. I want a better life for myself. That means college."

Students approach the college experience with high expectations, but their transition from high school to college is often fraught with pitfalls and

ERNEST L. BOYER is president of the Carnegie Foundation for the Advancement of Teaching, Princeton, N.J.

Illustration by Kevin Pope

confusion. The Carnegie Foundation for the Advancement of Teaching recently completed a study of undergraduate education in the United States, and one of our most disturbing findings is the discontinuity that exists between the public schools and institutions of higher education. Almost half of the prospective college students we surveyed said that "trying to select a college is confusing because there is no sound basis for making a decision."[1] Many high school seniors choose a college almost blindly. Once enrolled, they may not be satisfied with their choice, and many transfer or drop out – often for the wrong reasons.

How do high school students make decisions about which college to attend? To begin with, they are flooded with booklets and brochures from a variety of colleges. Almost always these are filled with photographs of serene campus settings – grass, trees, lakes, and streams. One admissions officer told us, "Market strategists have figured out that students want to be near water. So brochures appear with oceans, lakes, and rivers. I know one college that shows oceanfront even though it is located miles from the shore."

A typical high school senior will receive information from between eight and 10 institutions. Those whose standardized test scores are extremely high will receive many times that number. The brochures will be followed by a series of letters. Yet we found that students received this literature skeptically. For example, 40% of those we surveyed said that they felt the material they received does not "tell you what is really important about college." About 40% even questioned the accuracy of the publications. One high school student who had received a great many college letters told us, "I was delighted by all the attention I was getting, but I came to realize it was mostly form letters." Another remarked, "Colleges never tell you about the bad things." A third went even further. "Brochures are dishonest," he said.

Our research also revealed that, in their college search, 57% of all prospective students visit at least one campus and nearly one in four visits three or more. What do prospective students learn from these quick campus visits? While preparing our report, several members of our staff went on campus tours. They found that recruiters often focus on that which matters least.

TABLE 1.

Type of Information Desired by College-Bound High School Seniors and Their Parents Who Report a Lack of Information to Make Informed Decisions About College

	Students %	Parents %
Costs of tuition, fees, and books	81	85
Financial aid to students (scholarships, loans, jobs)	79	89
Academic programs offered	72	76
Student activities and campus life	71	73
Strengths and weaknesses of faculty	68	75
Places to live and living costs	67	79

Source: Carnegie Foundation for the Advancement of Teaching Survey of the Transition from High School to College, 1984-85.

At one university, a visit that lasted an hour and a half included a quick walk *past* the library and classroom buildings. The first stop was a lengthy exploration of the student union – a mini-mall stuffed with things to eat, buy, and do, where visitors viewed the bagel bar, the carry-out sandwich bar, and the outdoor dining terrace. Tour members learned about the variety of services and activities available in the union – from photocopying and check cashing to swimming, billiards, first-run movies, and continuous music videos.

Once outside again, the student tour guide told the group, "Each year on the mall, the campus has a student-run carnival with lots of booths where students push their projects and sell their wares." After passing the administration building ("where you get financial aid"), the group moved on to the gymnasium. "A higher percentage of students participate in intramurals here than at any other college in the state," the group was told. The tour ended with a visit to a residence hall and a pep talk about the ins and outs of dormitory life.

On this particular campus visit, prospective students and their parents learned about festive occasions, but not about who teaches undergraduate classes. They visited the student union and the dorms, but not the library. The winning football record was discussed, but no mention was made of academic honors. Visitors heard about beer parties, but not about concerts and lectures. The group was left with the distinct impression that the campus was a place with abundant social life. But what about education?

When we asked students what influenced them most during their visits to a campus, about half of them mentioned, not surprisingly, "the friendliness of students we met." But it was the *appearance* of the place – the trees, the walkways, the well-kept lawns – that was most influential in their decision. From our many campus visits and from our survey of students, we received the distinct impression that, when it comes to recruiting students, the director of buildings and grounds may be more important than the academic dean.

Still more disturbing, we observed colleges that appeared to be more interested in filling slots than in serving students. An admissions officer, staffing a booth at a national college fair, candidly expressed her discomfort with the way recruiting is often done. "The sad fact is that there are schools that will have to close, and we don't want to be one of them. But I'm concerned with the ethics of our marketing. We cheapen and tarnish the field when we misrepresent our institutions."

Clearly, colleges need to tell their stories with integrity and good taste. They need to be sensitive to the questions of prospective students and to provide accurate information. Most institutions, it appears, are doing these things fairly well.

But marketing can become a means that drives the end for which it was instituted. As the competitive pressure on colleges grows (and it surely will), abuses are likely to increase. A small advertisement in the classified section of the *New York Times* may reflect this market pressure: "Wanted: an exp'd person for ADMISSIONS OFFICE. Must have good speaking voice, telephone skills, and ability to close." Some years ago, the late Stephen Bailey warned that the predominant effect of a shrinking college market could well be a lowering of integrity, a decline from the relative innocence of the past. Even if only a few colleges are careless about facts and make exaggerated claims, parents and students will begin to hold all colleges in low regard.

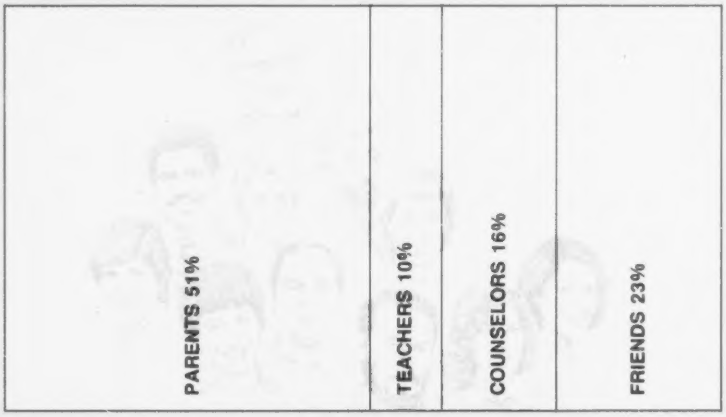
PROSPECTIVE students and their parents, looking for more objective information, often turn to commercial guides to colleges. Dozens of such books are now on the shelves, and yet, according to our survey, only *The College Handbook*, published by the College Board, is read by more than half of the seniors who plan to attend college. One father told us that he studied "every college guide [he] could get [his] hands on because they have the most objective information."

But trying to pick a good guide – one that provides important information – can be as complicated as trying to pick a college. In addition to *The College Handbook* and such standard works as *Peterson's Guide to Four-Year Colleges* and *The Selective Guide to Colleges*, dozens of others exist, such as *Everywoman's Guide to Colleges and Universities*, *A Guide to Post-Secondary Educational Opportunities for the Learning Disabled*, *The Black Student's Guide to College*, *Guide to Christian Colleges*, *Where the Girls Are Today: The College Man's Roadtripper Guide to All Women's Colleges*, and *America's Lowest Cost Colleges*.

Some of these commercial guidebooks report on such items as college costs, library holdings, and average scores of freshmen on the Scholastic Aptitude Test (SAT). Most of this information, though, is a year or more out-of-date. Other guides provide gossipy tidbits about food, sex, drugs, and alcohol. The problem is that each publication uses its own yardstick to measure excellence or decadence. Each tells the story it thinks students want to hear, and all the guidebooks, ranging from the serious to the raunchy, are placed side by side on the bookstore shelf.

But even with brochures, letters, college guidebooks, and campus visits, high school students and their parents still feel inadequately informed. When we surveyed our sample of students and parents in December of the students' senior year, half of those who were planning to attend college said that they still did not have "enough facts to make an informed decision." Of this group, about 80% felt that they needed additional information about costs and financial aid. More than two-thirds wanted to know more about academic programs, student activities, faculty strengths and weaknesses, and living accommodations on campus. Parents, even more than students, expressed a strong need to be better informed about college costs and financial aid (see Table 1).

FIGURE 1.
Individuals Offering the Most Influence In Selecting a College (As Reported by High School Seniors in 1985)



Source: Carnegie Foundation for the Advancement of Teaching Survey of the Transition from High School to College, 1985.

In their search for good information about colleges, nearly three-fourths of all prospective college students seek help from high school counselors. But the advice of counselors was rated far less influential than that provided by parents and friends (see Figure 1) – not because counselors are uncaring but because they are overworked and not sufficiently informed. The typical high school counselor, according to our survey, claims to have information on only about 15 to 25 four-year colleges and universities. We suspect that this is a generous estimate. Given the diversity of interests represented in most high school graduating classes, however, this hardly seems sufficient. And counselors say that they have very little knowledge about institutions that are more than 500 miles away from their schools.

It is not surprising, then, that only 57% of the high school students we surveyed said that the information they received from counselors was "relevant" to their college search (see Table 2) and that only 10% said that counselors were the "most important influence" in their selection of a college. One counselor told us, "We don't have that large a staff, and we have all the other problems to take care of. We see the kids for college guidance when they make an appointment. We don't do it automatically."

As we suspected, parents are particularly influential in the decisions young men and women make concerning college. Their interest in having their sons and daughters attend college is very strong. For example, 88% of the parents we surveyed wanted their seniors to attend college in the coming year, while 82% of the college-bound seniors reported that their parents influenced their decision to continue their education after high school. Interestingly, parents who did not themselves graduate from college appear to exert the strongest influence on their children's decision to attend college. Of students reporting "much influence" from their parents in making the decision to attend college, 54% were from families in which neither the mother nor the father was a college graduate, 26% were from families in which only one parent had earned a college degree, and 20% were from homes in which both parents were college-educated. In families in which both parents hold college degrees, the pressure to attend college may be less obvious because it is simply assumed that the children will also attend college.

ONE OF THE most distressing findings in our study of the transition from high school to college is the widening gap between college costs and the ability of students and their families to pay. Our survey revealed that financial considerations were most crucial when it came to actually choosing a college. The majority of college-bound students described college costs as "outrageous" and felt that they could not attend the college of their choice without some financial aid from outside the family. Sixty-one percent reported that they would need scholarships, loans, or part-time jobs to be able to attend *any* of their preferred institutions (see Table 3).

The dilemmas related to cost are likely to grow. For the past five years, tuition at America's colleges and universities has been rising at roughly twice the rate of inflation – and twice the rate of increase in family income.[2] Today, the average annual cost of attending a public college or university in the U.S. is about $5,200. At private institutions the average cost is now about $10,300.[3] This means that the student's family (or someone else) must invest, on average, from $20,800 to $42,000 in a four-year undergraduate degree. For students attending the most prestigious private institutions, the price can run to $60,000 or more.

Rising college costs take on special significance when compared with family income. We found, for example, that more than 40% of all undergraduates in our college survey report that they come from families with an annual before-tax income of less than $30,000. Sixteen percent are from families with an annual before-tax income of less than $15,000. Therefore, it is not surprising that most of the high school students we surveyed reported that they will need some outside help to cover their college costs.

We completed our inquiry with the firm conviction that the transition from school to college should be smoothed. Students and their parents urgently need to be much better informed about the full range of colleges in the U.S., and they should be given better advice about the alternatives – including financial ones – available to them. Such information is essential if the undergraduate experience is to be strengthened.

As a first step, public schools should take far more seriously their responsibility for assisting students in the transition from high school to college. In this, they could learn a great deal from the best of our private schools, which have always taken that transition seriously.

The schools could also be aided considerably in this effort by the national testing organizations – the Educational Testing Service, the College Board, and the American College Testing Program. In our report, we recommend that these organizations establish regional advisement centers throughout the country.

TABLE 2.

Evaluation of Major Sources of College Information By College-Bound High School Seniors And Their Parents (% Agreeing)

		Students %	Parents %
College representatives at "College Nights"	Relevant	62	65
	Accurate	73	68
High school counselors	Relevant	57	49
	Accurate	70	62
Comparative guides	Relevant	53	50
	Accurate	65	59
College publications	Relevant	32	34
	Accurate	59	49

Source: Carnegie Foundation for the Advancement of Teaching Survey of the Transition from High School to College, 1984-85.

TABLE 3.

How College Costs Affect College Choice (% Agreeing)

	High School Seniors %
I will be able to go to my first-choice college *without* a scholarship, a loan, or a part-time job.	29
In order to go to my first-choice college, I will have to get some type of scholarship or loan.	21
In order to go to any worthwhile college, I will have to get some type of scholarship or loan.	18
In order to go to any worthwhile college, I will have to get a part-time job and a scholarship or loan.	22
My family can't afford to have me go away to college next year but can afford to have me go to a local college and live at home.	10

Source: Carnegie Foundation for the Advancement of Teaching Survey of the Transition from High School to College, 1984-85.

Such centers would be places where high school counselors could learn about colleges in their own area and throughout the nation. We also urge these national testing organizations to give grants to strengthen counseling services to high schools, especially those with low college-going rates. We suggest, too, that travel grants be made available for high school counselors, so that they can visit college campuses – and the proposed regional advisement centers – to become better informed about higher education.

Furthermore, we recommend that the Commission on Self-Regulation of the American Council on Education draw up a strict code of conduct for college recruitment, based on the work already done by the nation's registrars and admissions officers. To insure compliance with this code, we urge that the six regional accrediting associations carefully review recruitment procedures as a part of their evaluation of every college and university.

IN ADDITION TO recommendations for schools and colleges, we have some recommendations for students and their parents, as well. Prospective students should certainly look beyond glossy brochures, lake views, and well-kept lawns. When preparing for campus visits, students should list the things they want to know about a college and formulate specific questions, focusing especially on teaching and learning and on the quality of campus life. During tours, prospective students need to press for candid answers. And if what they hear is not sufficiently informative, they ought to arrange for an extended tour, asking for separate interviews with faculty members and conversations with students.

Students and their parents should certainly read more than one guidebook and be skeptical of those filled with colorful anecdotes about a college that, though fascinating, reveal little about the educational quality of the institution. Students should dig deeper and ask such important questions as, Who teaches lower-division courses? Are professors accessible? Is good teaching considered important for promotion and tenure? How many of the learning resources described in the college's promotional literature (computers, for example) are easily available to undergraduates?

Prospective students should also look into how a college treats new students. Nearly every college has an orientation program, but the quality varies widely from campus to campus. At one major state university we visited, an optional two-day session for freshmen and transfer students is provided at a cost of $40, but only a handful of students show up, and the ones who do say it is only marginally helpful. What a college does to help freshmen make the academic and social transition to college life says a great deal about the institution and its values.

Prospective students should also look at provisions for academic guidance. Who does the advising? Colleges that have a low ratio of students to advisors and insist that faculty members reserve a certain number of hours each week for students demonstrate their determination to provide support outside the classroom.

Numbers, too, are worth examining. The number of volumes in the library is often given in the promotional literature of a college, but circulation figures offer better information about the academic environment of the campus. Having a large number of books on the shelves of the library doesn't mean much if students don't use them. And how does the library budget compare to budgets for such activities as intercollegiate athletics?

The average scores on national entrance exams are often used as a measure of an institution's selectivity. But here, too, numbers can be deceptive. Saying that the mean SAT score is 1,000 actually explains very little. Knowing the *full range* of scores in the freshman class is far more useful.

Prospective students should certainly find out about the dropout rates at colleges they are considering attending. What percentage of students return for their sophomore year? That a large number of students who enroll do not graduate is not necessarily a reason to scratch a college off a prospective student's list, but it should make that student more cautious.

At the heart of a college is its academic program. Does the college have a well-defined general education curriculum that is something more than a grab bag of distribution courses? Is the academic major a narrowing or a broadening experience? And what about life outside the classroom? Is the campus enlivened by a community spirit? What sort of relations exist between the college and its surrounding community?

Does the college have a placement program that is useful – not only to business graduates, but also to those in liberal arts? What professional and graduate schools do the graduates of the college attend? And does the college also give priority to public service?

During the past quarter century, nearly all the conditions surrounding the passage from high school to college have changed. I believe that we urgently need creative new approaches to this transition in order to match these new conditions.

What colleges and universities need is not a new batch of marketing techniques that will put the right number of students in each college class. Instead, colleges and universities, working closely with the schools, need to commit themselves to helping students make the right personal choices that will start them on an educational journey that will extend beyond their college years.

Above all, prospective students and their parents should not be intimidated by the transition process. It is wrong to believe that one type of college is right for everyone. There are a large number of colleges of all sizes, both public and private, that offer a solid, challenging undergraduate experience. The key for prospective students is to know what their options are and to keep them open. For schools and colleges, the challenge is to give helpful guidance, so that students can confidently take that first step toward fulfilling their hopes and dreams.

---

1. The Carnegie Foundation for the Advancement of Teaching recently completed several surveys, site visits to 29 institutions, and hundreds of interviews as part of the preparation for the forthcoming report, *College: The Undergraduate Experience in America*, which will be published in early 1987 by Harper & Row. In this article, I have made extensive use of the findings from our surveys of 1,000 high school students and their parents, as well as from our poll of high school guidance counselors.

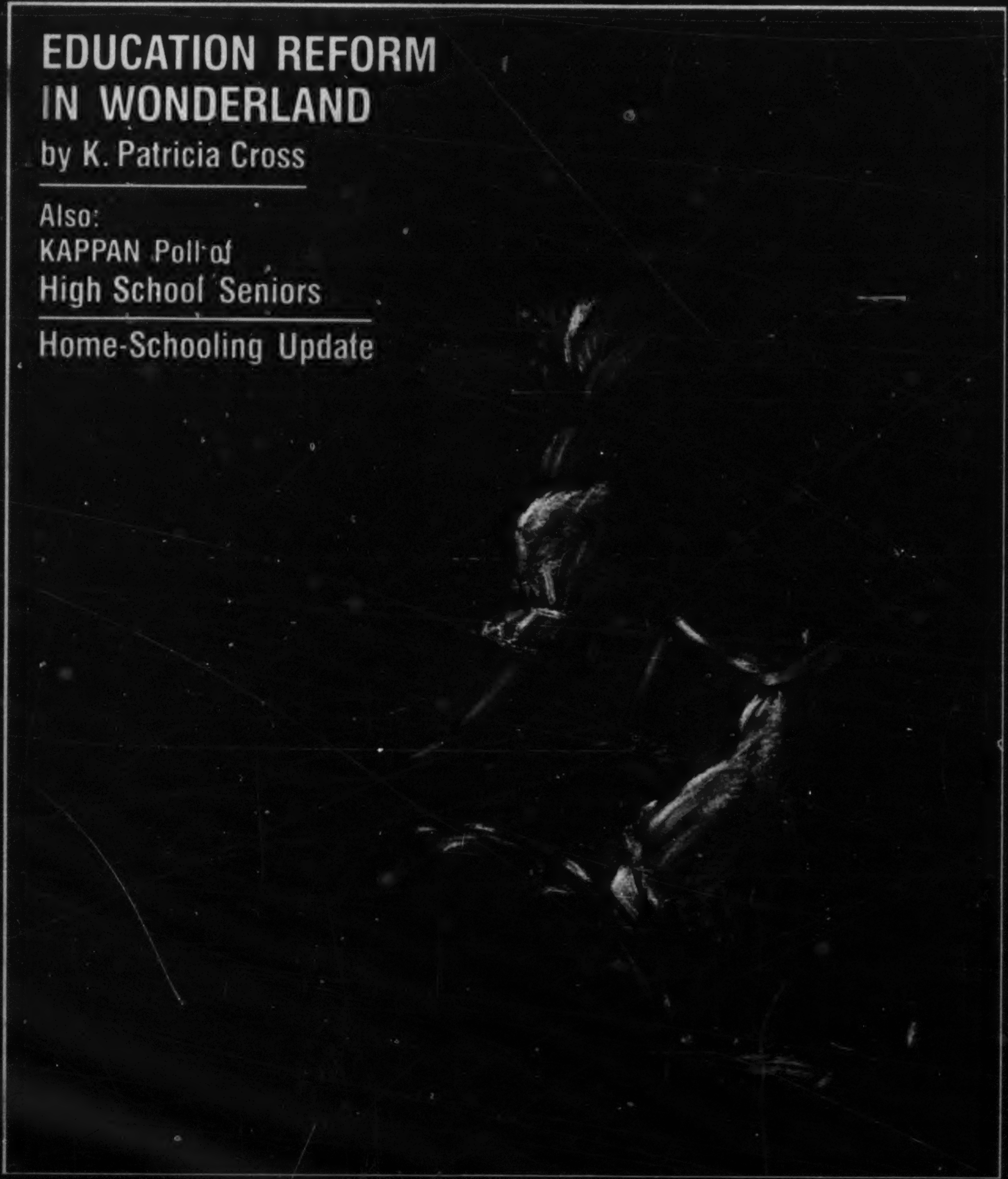
2. U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1986* (Washington, D.C.: U.S. Government Printing Office, 1985), p. 450; U.S. Department of Labor, Bureau of Labor Statistics, "Listing of Consumer Price Indices, 1949 to 1985," unpublished; and Cathy Henderson, "Forecasting College Costs Through 1988-89," *American Council on Education Policy Brief*, January 1986, p. 4.

3. Henderson, p. 4. K

A8680-1 A
3/10/87

PHI DELTA
MARCH 1987

KAPPAN



EDUCATION REFORM IN WONDERLAND

by K. Patricia Cross

Also:
KAPPAN Poll of
High School Seniors

Home-Schooling Update

Phi Delta
March 1987 • Volume 68 • Number 7

KAPPAN

FEATURES

496 **The Adventures of Education in Wonderland: Implementing Education Reform,** *by K. Patricia Cross*

503 **High School Seniors React to Their Teachers and Their Schools,** *by David L. Clark*

510 **An Overview of Home Instruction,** *by Patricia M. Lines*

518 **The World as Seen by Students in Accelerated Christian Education Schools,** *by Dan B. Fleming and Thomas C. Hunt*

520 **ACE Responds,** *by Ronald E. Johnson*

524 **Policy Options for Preschool Programs,** *by Lawrence J. Schweinhart, Jeffrey J. Koshel, and Anne Bridgman*

529 **Kindergarten in America: Five Major Trends,** *by Sandra Longfellow Robinson*

531 **Education of the Gifted and Talented in the World Community,** *by Bruce M. Mitchell and William G. Williams*

535 **Gifted Education Boondoggles: A Few Bad Apples or a Rotten Bushel?,** *by Lauren A. Sosniak*

539 **The Minnesota Dialogue on Education,** *by Ruth E. Randall*

544 **When Good Intentions Aren't Enough,** *by Samuel S. Wineburg*

DEPARTMENTS

490 **THE EDITOR'S PAGE,** Our Share of Night

492 **WASHINGTON REPORT,** *by Anne C. Lewis*

494 **STATELINE,** *by Chris Pipho*

546 **RESEARCH,** *by Gerald W. Bracey*

550 **DE JURE,** Financial Exigency Is Alive and Well in Idaho, *by Thomas J. Flygare*

551 **IN EUROPE,** Europe in European Curricula, *by Michael G. Bruce*

553 **PROTOTYPES,** Guiding Minority Students into Adulthood, *by Judith Kleinfeld*

555 **BOOKS,** *Laurence D. Brown*

557 **NEWSNOTES**

563 **BACKTALK**

Cover Illustration: Mark Braught

High School Seniors React To Their Teachers And Their Schools

For the most part, seniors like school, give their own schools high ratings, and view their teachers as knowledgeable and competent. Mr. Clark finds strong foundations on which reform can be built.

BY DAVID L. CLARK

HIGH SCHOOL seniors in the United States do not express alarm over the schools they attend or the teachers with whom they work. By and large, they like school, give their schools high ratings, and view their teachers as both knowledgeable and competent.

A surprising number of U.S. high school seniors report that they would like to become teachers. They worry about such matters as substance abuse, disciplinary infractions in school, and the way their schools handle discipline. They want to be more involved in discussing school problems and establishing and enforcing rules of conduct. Some of their observations confirm the results of various polls of adults; e.g., "disruptive student behavior is a major school problem." But others are not at all like adult views; e.g., "teachers' knowledge of subject matter is no problem" in classroom instruction.

In the spring of 1986 Phi Delta Kappa and the Center for Survey Research at Indiana University surveyed 1,712 high school seniors in 421 high schools across the country.[1] The data and discussion that follow are based on that survey.[2]

TEACHERS

Grading teachers. If you are looking for a problem that students see in U.S. high schools, don't look at their teachers. Asked to assign grades to their teachers, 26% of high school seniors gave their teachers an A and 48% gave them a B. Only one in 20 assigned a grade of D or F.

There are systematic differences in student grading of teachers by type of school[3] and by the socioeconomic status of the student.[4] Students in private schools rate their teachers more highly than students attending public schools. Forty-one percent of private school students assigned their teachers an A, while only 24% of public school students did so. Thirty percent of those in the highest socioeconomic group gave their teachers an A, while only 23% of those in the lowest socioeconomic group did so.

Becoming a teacher. If students are favorably disposed toward their teachers, why don't more of them want to become teachers? In fact, many of them do. Twenty-two percent of the seniors surveyed said that they would like to become teachers. This is in contrast to the 6.2% of entering college freshmen who declared an interest in teaching.[5] Twenty-two percent is almost exactly the percentage of the college graduating class that the Carnegie Forum on Education and the Economy has stated will be required to meet the need for teach-

> *A surprising number of U.S. high school seniors report that they would like to become teachers.*

DAVID L. CLARK (Indiana University Chapter) is the Parrish Professor of Education in the Curry School of Education at the University of Virginia, Charlottesville. A copy of the full 96-page research report on which this article is based can be obtained by writing Stanley Elam, Poll Coordinator, Phi Delta Kappa, P.O. Box 789, Bloomington, IN 47402. The cost is $15, including postage. Make checks payable to Phi Delta Kappa.

ers for the early 1990s. Of course, saying that they would "like to become" teachers is different from declaring an interest in education as an undergraduate major.

The positive news, however, is the remarkably large group of high school seniors that is favorably disposed toward teaching. Those who responded positively said that they did so because they liked helping or working with others (32.5%). Those who responded negatively commented on teachers' low salaries (28%) and the problems and frustrations faced by teachers (24%). Only 3% cited the lack of status and recognition accorded to teachers as a reason why they would not like to become teachers. This often-cited disincentive to pursue a career in teaching apparently goes unrecognized until later in the process of career choice.

An interest in teaching is more frequent among seniors in public schools (23%) than among their counterparts in private schools (17%), and more frequent among young women (27%) than young men (17%). The poll found no significant difference by socioeconomic status or race. There is a positive relationship between grades and desire to become a teacher. Table 1 shows 1) that the pool of interested young women has not dried up, 2) that high school students from minority groups are still interested in teaching, and 3) that high school students who would like to become teachers are not the academically least able students.

Teacher characteristics. What characteristics do students feel are important in teachers? The students surveyed said that to "help students in class" teachers need to be understanding, knowledgeable, and fair. Asked how many of their teachers exhibited such characteristics, the students rated their teachers highest in knowledgeability and lower on fairness and understanding. Table 2 shows that students hold the following provocative perceptions of teachers:

- Teachers are more demanding and strict than they need to be.
- Teachers are rated low on both being interesting and being creative. A majority of respondents found few or none of their teachers exhibiting such characteristics. The students felt that being interesting is more important for teachers than being creative.
- Students do not give teachers low ratings on their knowledge of content or on their level of competence, though such characteristics are being called into question by current reform studies.

Reactions to some teacher characteristics varied substantially by the socioeconomic status of the students. Students from a low socioeconomic background felt that, in order to be helpful to students, teachers needed to be friendlier, more understanding, and stricter. They placed correspondingly less emphasis on teachers' being interesting, fair, knowledgeable, and competent. In practice, seniors from low socioeconomic backgrounds found teachers to be less friendly, less knowledgeable, and less competent than did students from upper socioeconomic groups. These data are consistent with the higher grades awarded to teachers by students in the upper socioeconomic groups.

Teacher behaviors. The students were presented with eight teaching behaviors that are sometimes said to create problems. They were asked to indicate whether such problems occurred in their school. The major concern of students was easy to identify. Eighty-one percent of the students said that sometimes (48%) or frequently (33%), "Teachers give special attention to favorite students." No other item commanded a re-

TABLE 1.

Percent of High School Seniors Who Would Like to Become Teachers

Student Category	Yes %	No %
Public school students	23.0	77.0
Nonpublic school students	17.1	82.9
Male	17.0	83.0
Female	27.2	72.8
Black	26.4	73.6
Hispanic	30.8	69.2
White	21.8	78.2
Average grade of student		
A/A –	22.6	77.4
B + /B/B –	24.1	75.9
C + /C	20.6	79.4
C – /D	15.3	84.7
Vocational plans		
Four-year college	25.6	74.4
Graduate school	26.7	73.3

TABLE 2.

Characteristics of Teachers

	Needed		Demonstrated	
Characteristic	Rank	% Saying Very Important	Rank	% Noting Most or All
Understanding	1	82	6	66
Knowledgeable	2	81	1	87
Fair	3	78	4	71
Interesting	4	72	9	41
Organized	5	67	5	69
Competent	6	62	3	75
Friendly	7	60	2	80
Creative	8	44	10	33
Demanding	9	22	7	62
Strict	10	10	8	44

Figures add to more than 100% because of multiple answers.

sponse rate above 18.5% in the category "frequently."

Other items that more than half of the students cited as more than rare occurrences were: "Teachers waste too much time on things that are not important" (frequently, 13.5%; sometimes, 40.5%); "Teachers show bias in assigning grades" (frequently, 11.5%; sometimes, 44.8%); "Teachers give homework that is too long or difficult to complete on time" (frequently, 11.7%; sometimes, 44.7%); "Teachers seem to teach mainly for the benefit of top students" (frequently, 11.6%; sometimes, 38.9%); "Teachers do not use effective teaching methods" (frequently, 8.2%; sometimes, 46.7%).

Even taking into account the ease with which a respondent could check "sometimes" (almost everything happens sometimes), less than half of the students checked the following problems as occurring in their schools: "Teachers do not appear to care whether students learn the subject or not." "Teachers do not know the subject well enough to teach it effectively." Despite persistent criticisms of the subject-matter background of teachers, 72% of these high school seniors said that lack of knowledge of the subject being taught never or rarely interfered with effective teaching in their schools.

There were a few significant differences in reactions to teacher behaviors by subgroups of respondents. Students in private schools viewed their teachers more favorably, as might have been anticipated from the higher grades they assigned to teachers. A substantially larger proportion of public school students indicated concern that their teachers 1) taught mainly for the benefit of top students, 2) wasted time, and 3) did not appear to care whether or not students learned the subject. Gender had no statistically significant effect on student responses to teacher behaviors. Nonwhite students were concerned about teachers teaching mainly for the benefit of top students. In two categories, the average grade of the students reflected special student concerns. The lower the average grade, the more likely that the student felt that teachers are uninterested in whether students learn and that they concentrate on the top students.

Table 3 illustrates the nagging problem of alienation among students who have not performed well in school but have nonetheless remained in school through the senior year. Many of their peers, who would have shared their concern on these issues, have already dropped out at earlier grades.

Students do not give teachers low ratings on their knowledge of content or on their level of competence.

SCHOOLS

Grading schools. High school seniors believe that the public schools in the U.S. are in trouble. Only about one in 20 (5.7%) would give them a grade of A. Less than 1% of nonpublic school students would assign the public schools an A. Nearly 20% of nonpublic school seniors and 10% of public school seniors would give public schools grades of D or F. The median grade that the students would award to the public schools is C.

On the other hand, most students give the school they attend a good grade (see Table 4). Fewer than one in 20 rate their school below average. One-quarter of all students think that their school deserves an A. Three-quarters would grade their own school A or B.

When it comes to assessing schools,

TABLE 3.
Teachers' Perceived Favoritism

Item	Students Responding "Frequently" (%) A/A−	B+/B/B−	C+/C	C−/D
Teachers seem to teach mainly for the benefit of top students.	7.4	11.2	13.7	21.7
Teachers do not appear to care whether all students learn the subject or not.	6.7	10.7	14.6	21.7

TABLE 4.
How High School Seniors Rate Schools

Grade	Your Own School			Public Schools in Community			Public Schools in Nation		
	All %	Public %	Non-Public %	All %	Public %	Non-Public %	All %	Public %	Non-Public %
A	24.1	22.2	42.6	8.2	8.7	3.3	5.7	6.3	0.7
B	48.1	48.5	43.9	44.3	45.9	28.9	35.3	36.2	26.3
C	23.8	25.0	11.6	38.8	39.0	37.5	48.8	48.2	53.9
D	3.4	3.5	1.9	7.6	5.8	25.7	9.5	8.8	17.1
F	0.7	0.8	0.0	1.0	0.7	4.6	0.7	0.5	2.0

lack of familiarity breeds contempt. As Table 4 shows, high school seniors believe that the trouble with public education is elsewhere. High school seniors think that the quality of their own schools is high, but they doubt the quality of public secondary schools in general. Ratings of schools decline precipitously when students are asked to rate schools in the community as a whole rather than the school they attend, and the ratings continue to decline when students are asked to render an opinion about the nation's schools. (This same phenomenon has appeared in ratings of schools by parents in Gallup Polls of the Public's Attitudes Toward the Public Schools.)

A disturbing feature in these data is the reaction of seniors in nonpublic schools. They hold quite strong negative feelings about public schools and react even less favorably to public schools about which one would assume they know something (i.e., schools in their own communities) than toward schools in the nation as a whole.

Students with higher average grades rated their schools distinctly higher than did students with lower grade-point averages. For example, A students were 2½ times more likely to give their schools an A than were C students. Seniors in academic tracks rated their schools higher than did seniors in vocational or technical tracks. Students in the highest socioeconomic category were more likely to give their schools an A (28%) than were students in the lowest socioeconomic category (21%), and those in the highest socioeconomic category were also less likely (3.3% to 5.3%) to give their schools a grade of D or F. As was the case with their ratings of teachers, students who need more

TABLE 5.
How High School Seniors Feel About Their School

	I do not like my school at all.				I like my school very much.
	0 %	1 %	2 %	3 %	4 %
All students	1.8	7.3	27.1	44.9	18.9
Public school students	1.9	7.7	26.2	46.0	18.2
Nonpublic school students	0.6	3.2	25.8	44.5	25.8
Average grade of students					
A/A−	1.4	3.9	18.1	47.2	29.4
B+/B/B−	1.5	6.9	24.7	48.7	18.1
C+/C	2.2	9.4	33.3	39.8	15.2
C−/D	6.7	5.0	36.7	38.3	13.3

TABLE 6.
Reactions of High School Seniors to School Policies and Practices

Item	Strongly Disagree %	Disagree %	Neither %	Agree %	Strongly Agree %
My school provides enough opportunities for student discussion of school problems.	21.1	35.3	14.7	24.6	4.3
Students in my school are given enough responsibility for judging the behavior of fellow students and assessing penalties for misconduct.	14.4	36.9	23.6	22.7	2.3
Students in my school are given enough responsibility in establishing rules of conduct.	10.0	28.9	19.4	38.2	3.5
My school does not place enough emphasis on such traditional academic subjects as English, history, math, and science.	30.3	49.1	12.4	6.1	2.0
My school does not place enough emphasis on developing students' ability to think.	11.2	34.1	21.5	24.4	8.9
My school does not place enough emphasis on training in character and citizenship.	8.1	25.3	30.5	28.7	7.4
Students in my school are not required to work hard enough in their classes.	11.4	44.7	21.7	19.1	3.2
Teachers in my school assign too little homework.	20.2	46.8	24.1	7.7	1.1
My school provides enough help to students with academic problems.	6.2	15.6	20.9	45.9	11.4
My school provides enough help to students with personal problems.	13.5	23.2	23.9	32.1	7.4
There is not enough cooperation between school authorities and parents of students at my school.	7.3	26.6	33.6	22.8	9.8

support from school may also have more difficulty obtaining it, since they are less well disposed toward the institution. However, even among students in the lowest socioeconomic category and among students with the lowest grades in their coursework, 60% to 65% gave their own schools an A or a B.

Liking school. High school seniors like school. Table 5 displays their responses to the question, "How do you feel about the school where you are now enrolled?"

Two-thirds of the students chose a positive response; 9.1% responded negatively. Students attending nonpublic schools were again more favorably inclined toward their schools. The most striking finding from this question becomes apparent when we look at the distribution of responses from students with different average grades. Students with higher average grades are much more inclined to like school. This self-rating of performance is not simply a surrogate measure of socioeconomic status. In this population of respondents, socioeconomic status was not correlated with liking school at a statistically significant level.

Although the overall picture is positive – that is, most students like their schools – significant numbers of seniors do not like school. Moreover, liking school is strongly related to success in school even among high school seniors, a group that does not include those young people who have already dropped out. The subculture of failure in the schools is a continuing problem for students and school personnel alike.

POLICIES, PRACTICES, PROBLEMS

School policies and practices. High school seniors disagree with school authorities about the way in which they are involved in solving school problems, especially discipline problems (see Table 6). A majority of the students said 1) that they are not provided with enough opportunities to discuss school problems and 2) that they are not given enough responsibility for judging the behavior of fellow students and assessing penalties for misconduct.

High school seniors were split almost 50/50 on the question of whether students are given enough responsibility in establishing rules of conduct. Student reaction to these practices is especially important because the most irritating problem noted by students from a set of often-cited school problems was, "Some students' behavior is so disruptive that many who want to learn cannot." When students were presented with an opportunity to provide free responses to a list of problems, they mentioned discipline problems most frequently. Students are concerned about discipline and student behavior, and they think they can help do something about it. The majority of high school seniors do not feel that their problem-solving abilities are being tapped.

Many practices cited by others as problems for teachers or students were viewed as relatively unimportant by these respondents (see Tables 6 and 7). Three-fourths of the high school seniors surveyed indicated that classes are rarely interrupted by announcements over the public address system. The majority indicated that classes are not too large for teachers to handle them effectively, and they did not feel that the presence of slow students interferes with overall class progress. The students also reported that their schools place sufficient emphasis on such traditional subjects as English, history, math, and science.

Seniors attending public schools equivocated on the questions of whether the schools place sufficient emphasis on developing students' ability to think or on character and citizenship education. About one-third viewed these areas as problems; an almost equal number discounted them; the remainder neither agreed nor disagreed. Students in nonpublic schools were satisfied with the emphases on both counts. Seniors in both public and nonpublic schools reported that students are required to work hard enough in their classes and that the homework assigned is sufficient. A substantial majority felt that the school provides enough help with academic problems, but the respondents split evenly on the question of the adequacy of the help that schools provide with personal problems. Responses were similarly divided on the matter of whether cooperation between school authorities and parents is sufficient.

Students with higher average grades rated their schools distinctly higher than did students with lower grades.

This picture of American high schools is different from the one that is often presented in the media. The respondents in this survey were undoubtedly better-than-average students; hence they might be expected to be critical of slovenliness in school practice. But they viewed their schools as:

- work-oriented in the classroom,
- requiring sufficient out-of-class homework assignments,
- emphasizing traditional academic subjects,
- including character and citizenship education, and

TABLE 7.
Reactions of High School Seniors to Selected Conditions in Their Schools

Item	Never %	Rarely %	Sometimes %	Frequently %
Classes are too large for teachers to handle them effectively.	15.0	38.1	37.1	9.9
Classes are interrupted by frequent public address announcements.	18.7	54.7	18.7	7.8
The presence of many slow students keeps classes from progressing satisfactorily.	16.9	49.1	29.6	4.4

Students Working

IF HIGH SCHOOL seniors often feel that they are asked to do too much homework – and 68% of them say that they feel that way – one reason may be their time-consuming jobs outside the home.

A startling seven in 10 seniors hold paid jobs, according to the 1986 Phi Delta Kappa-Indiana University study. Most commonly, they earn $50 a week or more. (The top 2% claimed earnings ranging from $200 to $800 per week.)

The more hours that students work, the lower the school grades they report. But this relationship is not necessarily causal. Youngsters from poorer families tend to receive lower grades than the scions of the rich, jobs or no jobs. But no one is likely to contend that frying Big Macs improves proficiency in American history or advanced algebra.

Something over 30% of the 1986 seniors also reported working at unpaid jobs outside the home. But the hours devoted to such jobs were modest, averaging between five and 10 per week.

Slightly less than half of the seniors received money allowances from their families. One-fourth of them received between $1 and $10 per week, 17% between $11 and $25.

All these data, along with other findings of the PDK-IU study, remind us that school is not the first concern of a host of 17- and 18-year-olds. Their other interests – ranging from cars, clothes, and televiewing to record playing and a multitude of social activities – consume big chunks of time, energy, and money.

In short, educators face enormous competition for the attention of young people, and this competition appears to be mounting.

– Stanley M. Elam, Coordinator
Phi Delta Kappa Polls

- providing adequate academic counseling.

High schools range from the chaotic to the scholarly; they should not all be swept up in generalizations about either extreme. But at the very least, in considering high school reform, one should listen to the voices of those most immediately involved.

Two statistically significant differences in responses to items in this category emerged when the socioeconomic status of the students was taken into account. Students in schools from areas with low socioeconomic status agreed more frequently that there is not enough cooperation between school authorities and parents at their school, and they were more likely to feel that their school does not provide enough help to students with academic problems.

School problem inventory. The seniors were asked to list any problem in their high school that they believed to be serious. High school seniors bring a sense of immediacy to their views of school problems. Although they are not unconcerned about academic problems, the behavioral problems that they face every day trouble them more. Table 8 summarizes their responses.

Discipline dominated the responses. Almost half of the seniors (43.5%) mentioned student behavior violations. But nearly as many (35.2%) noted that efforts to deal with these problems had become a problem in their own right. Under the heading of efforts to handle discipline, 17.2% of the students reported that their schools have too many rules (the second most frequently mentioned individual item). However, an almost equal percentage (18.1%) said that the problem is too few rules, rules that are inconsistent, or a particular obnoxious rule.

TABLE 8.
Serious School Problems Identified By High School Seniors

Rank	Problem	% Reporting
1	Discipline	43.5
2	Substance abuse (drugs, alcohol, tobacco)	37.2
3	Efforts to handle discipline	35.2
4	Facilities	15.2
5	Relationships with teachers	13.4
6	Curricular problems	12.8

Figures add to more than 100% because of multiple answers.

> *The school environment of most high school students is directly affected by problems of student behavior and substance abuse.*

The second most frequently cited category of school problems was substance abuse, mentioned by 37.2% of the respondents. The single problem cited most frequently came under this heading: drug abuse, mentioned by 19.2% of the respondents; in addition, 10% of the seniors surveyed mentioned alcohol abuse.

One thing is certain. The school environment of most high school students is directly affected by problems of student behavior and substance abuse. Students are deeply concerned about these problems, and they are unpersuaded that current solutions are ameliorating the situation.

But the dominance of the drug and discipline issues should not be allowed to obscure other problems mentioned by the students.

- Racial problems were mentioned by 8% of the respondents.
- Despite the good grades given to teachers, 13% of the respondents noted serious teacher/pupil problems, such as unfair or uncaring teachers.

- A relatively large number of respondents mentioned crowded or inadequate facilities.
- The most frequently mentioned curricular problem was a too-narrow set of course offerings or the absence of a desired course of study.

In this survey, high school seniors offered some good news about the American high school. They rated their teachers highly. They had an interest in becoming teachers. They liked school and rated their own schools above average. They were disturbed about behavior and drug problems, but they thought they could help in solving these problems.

How do these responses fit into the picture of the troubled American high school presented by such critics as Theodore Sizer and Patrick Welsh? First, the respondents in this survey were survivors of the system. The students for whom the high school fails most dramatically do not stay around long enough to become seniors. Second, in this survey both the schools and the respondents themselves were volunteers. As I noted earlier, the respondents are not representative of all groups of high school seniors in the U.S. Schools and students in trouble were underrepresented in this sample.

Finally, this was an opinion poll, and modal responses are always overemphasized. While most of these seniors rated their teachers A or B, 5% of them rated their teachers as failures, i.e., D or F. Consistently, students with lower self-reported average grades and students with fewer out-of-school learning resources (i.e., lower socioeconomic status) noted greater dissatisfaction with teachers, schools, policies, and practices.

Current in-depth case studies have dramatically portrayed some of the gravest shortcomings of the American high school. There is solace to be taken from the fact that last year's high school graduates had some positive responses to their schools and teachers. This fact denies neither the problems of the high school as an organization nor the self-evident fact that it fails to reach far too many students. However, organizational reform needs to be rooted in an organization's positive achievements. The American high school has some strong foundations on which reform can be built. At least, its clients think so.

The students for whom the high school fails most dramatically do not stay around long enough to become seniors.

---

1. The study was designed and executed by Stanley Elam, editor emeritus of the *Phi Delta Kappan*, and Jon Masland, co-director of the Center for Survey Research (CSR). Elam had initial help from N. L. Gage, Jack Frymier, Jerome Kopp, and Larry Barber. Terry F. White succeeded Masland as CSR co-director during the period of the study. She conducted the data analysis and prepared the technical report on the study.

2. The sampling design for the study guaranteed diversity but not representativeness. The primary sampling unit was the school, and participation by the school was voluntary. The voluntary participation rate of the national sample of schools was 56%. The school response rate from among the volunteers was 75%. The response rate of students was 70% (1,712 of 2,442). Nonrespondents were not followed up. The end result was predictable. In comparison to National Opinion Research Center (NORC) data on national occupational groups in 1983-84-85, the student self-report on father's occupation in this study overrepresented professional occupations (i.e., 21.7% in this study; 16.5% in the NORC study). The clerical and skilled trades and service occupations are underrepresented in this study by about 5%. Blacks are underrepresented – 9.6% of the respondents were black. Poor children are underrepresented.

To compensate for the sampling bias, each item response was examined for differences by race, gender, school grades, and socioeconomic status. Where such differences existed, they are noted. However, even this correction does not eliminate the problem. High school students in trouble, personally or academically, would almost certainly be represented less frequently in the respondent group, and the more extreme responses of this subgroup may not be represented at all. On individual items, this poll inevitably represents young persons predisposed to give a positive response. Readers should keep in mind that this is a skewed sample of survivors (i.e., seniors) of the high school experience. The average or modal response to each question probably represents best the attitudes of those high school students bound for college or for a technical school. More successful students are overrepresented; less successful students are underrepresented.

3. One hundred fifty-seven of the 1,712 respondents (9.2%) attended private schools.

4. The students were divided into four groups according to socioeconomic status (measured by father's occupation, home ownership, and level of father's education). These data were all obtained directly from the respondents, not from their parents. The categories ranged from highest (professionals and managers who own their own homes and have education beyond high school) to lowest (laborers with less than a high school education or unemployed). Roughly 40% of the study population fell into groups 1 and 3 (highest and lower-middle), and 10% each fell into groups 2 and 4 (upper-middle and lowest). One hundred cases were not classifiable because of incomplete data.

5. Carnegie Task Force on Teaching as a Profession, *A Nation Prepared: Teachers for the 21st Century* (New York: Carnegie Forum on Education and the Economy, 1986), p. 31. K

"Bringing home a report card is always a moment of high drama."

An Overview of Home Instruction

The world of home-schooling today is relatively small, but vigorous and diverse, says Ms. Lines. Continued growth of this movement seems likely, but at a slower rate than in recent years.

BY PATRICIA M. LINES

TENS OF thousands – perhaps hundreds of thousands – of children are meeting state compulsory education requirements at home rather than in school. Once the mainstay of education on the American frontier, home instruction is now regarded as not quite legitimate by some educators. Most often, though, these critics do not have a good general picture of home-schooling. Some may be basing their views on sketchy information or on one or two worst cases involving poor programs or even child abuse.

In this article, I will try to fill in this knowledge gap by providing an overview of this do-it-yourself practice, including a look at numbers, curricula, and some testing data. I will also briefly review official responses, paying special attention to constitutional limits on state regulation. Finally, I will offer some suggestions about how public educators and home-schoolers can end the hostility that too often characterizes their relationship.

THE WORLD OF HOME-SCHOOLING

The world of home-schooling today is small, but vigorous and diverse. Home-schoolers appear to share at least one thing: the firm belief that parents can and should be deeply involved in the education and development of their own children. Otherwise, reasons for undertaking home-schooling are as varied as the families and children involved.

PATRICIA M. LINES is a Seattle-based writer and attorney currently living in Washington, D.C., where she is a policy analyst with the U.S. Department of Education. The opinions expressed in this article are her own and reflect no official endorsement or support by the U.S. Department of Education.

Some parents object to the political or cultural values they find in public and private schools. Others do not like the instructional methods. Many agree with the late John Holt that children learn best in an unstructured environment in which the child sets the pace and direction. Many parents wish to spend extended time with their young children before enrolling them in school. Sometimes, recognizing the needs of a precocious child, a family decides that only a highly individualized program will permit that child to attain his or her highest potential. Still other parents want to give special attention to a child who is having trouble adapting to school for any of a variety of reasons.

In the words of the women who operate Learning at Home (a home-schooling support organization located in Honaunau, Hawaii), some parents choose home instruction because they are "committed to providing a more informal, individualized, and responsive style of learning. . . . These parents often birth their children at home, clothe them in natural fibers, feed them natural foods." Many parents undertake home-schooling as a matter of long-standing religious tradition: Mormons who operate "kitchen schools" for a few neighborhood children aged 5 to 7; Seventh-Day Adventists, many of whom believe that younger children should remain at home; the Amish, who often remove their children from school after grade 8. Today, however, the largest growth in home-schooling appears to be among devout Christian parents who are unhappy with the secular nature of the public schools and have not found a suitable religious school.

The actual number of children in home instruction seems to have grown from about 15,000 in the early Seventies to well over 120,000 today – perhaps as many as 260,000. (These numbers may seem high, but they represent less than 1% of the total school-age population.) These estimates are based on reports from organizations that supply curricular materials and support and are supplemented by interviews[1] and questionnaires that provide some measure of the numbers of parents who do not rely on such organizations.

In the early Seventies, only a handful of educational institutions enrolled children in a home curriculum or provided curriculum packages designed for parents teaching their children at home. These included the Calvert School, Home Study International, the International Institute, and the state of Alaska. Between 5,000 and 6,000 children in

grades K through 8 were estimated to be enrolled in or receiving curricular materials from these organizations. Based on interviews with those familiar with the movement and on two questionnaires described in Table 1, it appears that 50% to 75% of all parents engaged in home-schooling today design their own curricula rather than use the services or materials from these institutions. Assuming that this was also true in the early Seventies, between 10,000 and 15,000 children were probably being schooled at home during that period.

Table 1, which focuses on the 1985-86 K-8 population,[2] shows that the original four organizations now serve about 7,500 children (K-8). Some of the newcomers serve only a handful of children, but growth in the distribution of Christian-based curricular packages has been extraordinary. The organizations listed in Table 1 claim almost 50,000 children in grades K-8. If 50% to 75% of home-schoolers are designing their own curricula, they account for between 50,000 and 150,000 additional children. Finally, it appears that another 20% to 30% of home-schooled children are in grades 9-12,[3] bringing the total number of school-aged children being instructed at home to anywhere from 120,000 to 260,000.[4]

Has this growth peaked? It seems likely that more efficient printing and the cheapness of electronic media will make further expansion even easier. Recent changes in state laws have made home instruction simpler from a legal standpoint.

However, other powerful factors militate against much additional growth. First, not all parents are willing to make this kind of commitment. Even those parents who prefer to allow their children to remain largely self-directed usually find it necessary to forgo employment and other major activities throughout the duration of home instruction. Marie Della Bella, who has collected data on home instruction for Connecticut since 1983, has observed that only about half of the families registered with the state continue home instruction for more than one year. An administrator with Accelerated Christian Education agrees. A second powerful factor that works against the continued expansion of home-schooling is the increasing availability of Christian schools, which are likely to attract some of the parents who might otherwise turn to home-schooling. Finally, more parents of young children are entering the workforce. On balance, then, the home-schooling movement appears as a tiny countervailing trend, and it seems likely that it will continue to grow – but at a slower rate.

A closer look at these home programs reveals an astonishing variety of educational approaches and philosophies and an equally wide variety of characteristics of the families that use them. Systematically collected data are rare, but some do exist. For example, in 1984-85 the state of Washington conducted an experimental home-schooling program (at a time when home-schooling was officially illegal in that state). The state offered to recognize a home-school as a legal school if it was supervised by a certified teacher. (State law required private school teachers to be certified or, in exceptional cases, to be supervised by a certified teacher.) In this way the state was able to identify 500 home-schooled students.

Based on questionnaires received from 313 "parent/tutors" teaching these 500 children, the state found that 89% of the parent/tutors were female; 74%

Illustration by Dave Cutler

were Caucasian; 14% were Hispanic; and a few were native American (five parents), black (four parents), or Asian (one parent). Eighty-five percent of the parents reported incomes below $30,000. Four parents reported only a grade school education; 19 reported some high school. Almost one-fourth held a high school diploma; a few more had General Equivalency Diplomas; 41% reported some college; 16% held bachelor's degrees; 4% held graduate degrees.

Most of the parent/tutors (89%) had three or fewer children. Almost all the parents (95.8%) taught only their own children. Eight families reported four or more children in the home-school. Three of the parents said that they schooled children in addition to their own; five said that they tutored other children with assistance from the parents of those youngsters; nine said that neighborhood children sometimes joined them on projects. A majority (56%) estimated that they spent from 20 to 30 hours per week in directed activities with their children; 24% spent more than 30 hours; 13% spent between 15 and 20 hours; a few (6%) spent less than 15 hours.

My own more limited interviews suggest that some parents – many of them former teachers – think through their methods very carefully to meet the individual needs of their children. Others have less training, but they usually make an effort to discover an appropriate pedagogical approach for their children, sometimes consulting teachers, experts, or materials on child development and learning. Some families use a very traditional approach, including schedules and lesson plans that look exactly like those used in large-group instruction. Other families abjure structure and strongly believe in allowing the children to set the pace and direction of home learning. Some families move from structured to unstructured programs as the children become more self-directed. Many families try to arrange for some activities with other children and in the larger community. One home-school, for example, makes regular trips to a home for the aged, where the children read to the residents and help them in a variety of ways.

Examining the curricular packages in use in home-schools provides another perspective on the world of home-schooling. These materials reinforce the conclusion that home-schools follow no standard pattern. The materials of the School of Home Learning, in Escondido, California, display the motto, "Question authority." One small California group relies almost exclusively on the *World Book Encyclopedia*, supplemented by activities and projects.

The Calvert School, oldest of the organizations enrolling home-schooled children (it was begun experimentally in 1906 and officially in 1908), uses the same materials in its home program as on its Baltimore campus. These materials are based on those developed by the school's first headmaster, Virgil Hillyer, who adhered to such "radical" (for his day) ideas as teaching reading before teaching the alphabet and learning without textbooks. Calvert now uses a comprehensive set of workbooks, supplemented with other readings, including a healthy dose of the classics. The materials may be purchased for use with or without the services of a correspondent teacher.

TABLE 1.

Number of K-8 Children in Home Instruction (1985-86)

Provider	N
Abbott Loop Christian Center, Anchorage, Alas.	67
Accelerated Christian Education, Lewisville, Tex.	3,600*
Alpha Omega Publications, Tempe, Ariz.	2,700
American Christian Academy, Colleyville, Tex.	700
American Heritage Christian Academy, Sacramento, Calif.	150
Baldwin Park Christian School, Baldwin Park, Calif.	75
Calvert School, Baltimore, Md.	4,168
Christian Liberty Academy, Arlington Heights, Ill.	21,000
Clonlara School, Ann Arbor, Mich.	1,560
Discovery Christian School, Concord, Calif.	240
Evangelistic & Faith Enterprises of America, Inc., Oliver Springs, Tenn.	300
Family Centered Learning Alternatives, Arlington, Wash.	150
Hewitt-Moore Child Development Center, Washougal, Wash.	4,000
Home Study International, Takoma Park, Md.	1,509
International Institute, Park Ridge, Ill.	1,000
Learning at Home, Honaunau, Hi.	800
Our Lady of Victory, Mission Hills, Calif.	600
National Academy of Christian Education, Columbus, O.	1,050
Pensacola Christian School, Pensacola, Fla.	1,870
Pilgrim Schools, Porterville and three other sites in Calif.	200
Pilgrim Christian School, Maywood, Calif.	80
Santa Fe Community School, Santa Fe, N.M.	200
School of Home Learning, Escondido, Calif.	80
Seton School Home Study, Front Royal, Va.	500
Summit Christian Academy, Dallas, Tex.	1,800
Sycamore Tree, Costa Mesa, Calif.	175
State Department of Education, Juneau, Alas.	800
15 organizations with fewer than 50 children in 1985-86	123
Subtotal	49,497
Estimate of number whose parents prepare own curriculum**	50,000-150,000
	100,000-200,000

Figures include children enrolled in a school but remaining at home (often they correspond with a teacher) or receiving relatively complete curricular materials, support, or services. Organizations were located through a mailing list compiled by Holt Associates (December 1985), supplemented by my own research. Of 72 organizations identified, six were publishers serving both schools and home-schools (home purchasers only are accounted for in the table); three provided no data on numbers of children in their home-school programs; one had decided not to offer a home program; six were secondary or postsecondary only; 14 did not answer a letter and had no telephone listing (and presumably do not serve large numbers of home-schoolers).

*Of these, 1,800 are enrolled, and 1,800 represent a rough estimate. ACE distributes 225,000 K-8 packets (54 are required for a full year) annually but has no record of how many go to home addresses. ACE also supplies "tutorial centers" (six or more children, two or more families), which are not included here.

**In a Washington poll of 100 teachers supervising home-instruction programs, 41% said parent/tutors "usually/always" selected curricular materials from a publisher, and 47% said they "never/sometimes" did so. The Home-School Legal Defense Association randomly sampled 300 of its membership files (about 3,000 total) and found that 72.33% of its members said they planned their own curriculum and that 27.67% said they used a correspondence program.

Alaska originally modeled its program after Calvert's, but it has since added some significant modifications. The correspondence teachers, based in Juneau, visit their students in person from time to time and are in frequent contact by telephone. (Alaska has a grant from the U.S. Department of Education to provide technical assistance to public or private institutions that wish to replicate its program.) Family Centered Learning Alternatives, in the state of Washington, also maintains personal contact with the children; a certified teacher assists in designing an individual program for each child, meets with each family at least weekly, advises parents on their role as primary tutors, and helps arrange group activities for children from several families. Some organizations, such as the Clonlara School, in Ann Arbor, Michigan, and Learning at Home, in Honaunau, Hawaii, help parents develop an individualized curriculum using materials they develop, as well as texts and workbooks from commercial publishers. The Hewitt-Moore Child Development Center and the Evangelistic & Faith Enterprises of America both provide special assistance to families with learning-disabled children.

The largest of the religiously based organizations appears to be Christian Liberty Academy, which provides home-schoolers with an individualized package of textbooks and workbooks. Academy officials initially used older textbooks, the McGuffey Readers, and packets of material from Accelerated Christian Education (ACE). They no longer use ACE materials, and they now draw on a wider range of suppliers, including A Beka Publications (affiliated with Pensacola Christian College), Bob Jones University Press, and Rod and Staff Publishers (a Mennonite group). Most of their families send tests and other materials to Christian Liberty Academy for evaluation and grading. Teachers and other professionals are employed for this task.

The materials from ACE guide children through a sequential home-study curriculum that relies heavily on Biblical passages, moral homilies, and similar religious texts. The materials consistently show two-parent families and traditional sex roles for individuals. Minority families are shown in much the same way as majority families. The current criticism of the ACE materials appears to focus mostly on the anti-Communist and authoritarian approach of the history and social studies packets.

One of the newcomers – the Pensacola Christian School – has pioneered the concept of video schools. It enrolls 70 students nationwide and provides televised classes, along with other services. Most home-schoolers regard television as of limited usefulness, however.

Perhaps the most important assessments of home-schooling focus on the ultimate academic success or failure of the children. While some home-schooled children probably suffer from negligent or incompetent parent/tutors, others flourish. A recent example is the admission to Harvard University in 1984 of a young man who had been taught entirely at home. His brother was also admitted to Harvard in 1986. In February 1986 a Florida youngster who had been schooled at home through sixth grade walked off with top individual honors in a Mathcounts competition.

Such cases are merely anecdotal, of course. But scattered testing data suggest that successes are more numerous than failures in home-schools. Alaska, which has tested home-schooled children for years, finds them performing above average on nationally standardized tests.

One study of children in a home tutorial network in Los Angeles showed that the children scored higher on standardized tests than did their peers in Los Angeles public schools. In the experimental state program in Washington described above, the state tested 100 children (all of those who remained in the program from spring 1984 to spring 1985). Although the sample was too small to permit generalization, a majority of the students were at or above average on the Stanford Achievement Test. Information on income and parental education from the survey of parents indicates that this was not an elite group.

More testing data may be available soon. Testing is required in Connecticut (at the option of the local district), Florida, Georgia, Kentucky, Nebraska, New Mexico, New York, North Carolina, Oregon, South Dakota, Tennessee, Virginia (at the option of the local district), Washington, and West Virginia. However, some of these states, such as Kentucky and Oregon, rely on local districts to test and process data; the state itself does not collect the data. In Arizona, the tests may be scored at the state level, but not every district uses that service, and the state does not require its scoring contractors to aggregate data.

The evidence for the social development of home-schooled children is even scarcer. What exists suggests superior development. John Wesley Taylor of Andrews University tested 224 home-schooled children (randomly drawn from a list of 45,000 addresses supplied by Holt Associates and the Hewitt-Moore Child Development Center). Using the Piers-Harris Children's Self-Concept Scale, he found that half of the home-schooled children in his sample scored at or above the 91st percentile. His sample may be biased, and testing procedures may have influenced the outcome.

One might also look for activities that educators believe enhance social development. If group activity is the basis for such development, home-schools can provide it. There is evidence that most home-schooled children engage in frequent group and community activity.

Of course, high test scores provide no evidence that all children would benefit from the experience of home instruction. Della Bella reports that 90% of Connecticut children who begin a program of home instruction are already at or above grade level. The test data are evidence only that, in general, children in home-schools are having successful experiences.

HOME-SCHOOLING AND THE LAW

States regulate home instruction through compulsory education laws –

MATH TEST
Campbell

"Whoever said there's safety in numbers didn't get the numbers I do."

laws designed approximately a century ago to address the problem of truancy. Often these are criminal laws. Until recently, several states did not recognize home instruction as a way of satisfying such laws, and in these states parents were prosecuted and sometimes jailed because they taught their children at home. By the end of 1986, however, every state permitted home instruction in some form. Only a few strictly regulate it: Iowa, Michigan, and North Dakota require teachers in home-schools to be certified.

Different branches of state government have taken the initiative where home-schooling is concerned, often after litigation or intense lobbying efforts. Twenty-nine state statutes now explicitly allow instruction at home by a parent or tutor. Missouri adopted a new law in 1986; Arkansas, New Mexico, Tennessee, Washington, and Wyoming in 1985; Georgia and Virginia in 1984; and Wisconsin, West Virginia, Mississippi, Arizona, and Montana in 1983. In addition, several states have liberalized their laws. For example, in 1985 Florida repealed a requirement that children taught at home be taught only by state-certified teachers.

Statutes in another 12 states (Connecticut, Delaware, Idaho, Indiana, Maine, Maryland, Massachusetts, New York, New Jersey, Oklahoma, Rhode Island, and South Carolina) and the District of Columbia mandate that children be educated (without specifying where) or require *either* school attendance *or* some nonschool alternative, such as "equivalent instruction." Courts in Maryland and Indiana have recently held that such language authorizes home instruction.

Nine states require school attendance, with no exceptions. However, Illinois and North Carolina recognize home instruction by virtue of court decisions determining that the requirement of "school" attendance is satisfied by attendance at a "home-school." Michigan's attorney general and state boards of education in Kansas, Kentucky, Minnesota, Nebraska, North Dakota, and New Hampshire have also decided that the home can be a school. The state board of education in Texas – the last holdout – adopted optional guidelines last summer as part of a failed effort to settle a lawsuit. California, with a statute permitting home-schooling by a certified tutor, has also permitted the practice as a local district option by authorizing "independent study" through public schools or through the acceptance of home-schools as private schools.

By the end of 1986, every state permitted home instruction in some form. Only a few strictly regulate it.

Although state policy has consistently moved in the direction of more relaxed regulation, the response of the courts to home-schooling has varied considerably. In the past few years, courts in Alabama, North Carolina, North Dakota, and West Virginia have upheld state requirements that greatly restrict or effectively prohibit home-schooling. State supreme courts in Arkansas and Kansas ruled that compulsory attendance laws required school attendance, and they refused to find that home-schooling could satisfy that requirement. (In all these states, the legislatures responded by recognizing home-schooling in some way, though the degree of regulation varies.)

By contrast, several other courts have struck down compulsory education laws because they were too vague or overbroad. The chief problem was the failure of the laws to define "school" or "equivalent instruction." Courts generally do not favor laws that might give administrators authority to regulate free speech or other innocent activities. Such legislation might discourage cautious people from exercising their First Amendment rights and at the same time fail to put individuals on notice of what is prohibited. Thus courts in Georgia, Iowa, Wisconsin, Minnesota, and Missouri have thrown out all or part of those states' compulsory education laws. All but two of these states have since passed new laws that specifically permit home instruction. Iowa has not acted, and Minnesota has a new law authorizing a study of the issue.

Faced with similar definitional problems, the Illinois Supreme Court decided that the home can be a "school" and thus made home instruction legal in that state. The North Carolina Supreme Court recently took the same view. A federal court in Indiana held in 1986 that "equivalent instruction" included home instruction.

Although the U.S. Supreme Court has never reviewed the right to home-schooling, cases involving the free exercise of speech and religion and a handful of related school cases suggest that constitutional interests are at stake. Generally, when a First Amendment interest can be found, the Court weighs the interest of the state against an individual family's freedom to determine a child's education. The Supreme Court decision in *Wisconsin* v. *Yoder* – which found that compulsory attendance requirements for children after grade 8 violate the First Amendment rights of the Amish – is, in many ways, a home-schooling case.

Although the Court ruled narrowly in *Yoder*, prior decisions dealing with conscientious objectors to military service indicate a willingness to extend freedom of religion to those motivated not by religion but by conscience. Many legal scholars now believe that the family's interest should prevail in the matter of home-schooling and that the state's interest can be met in other ways. The American Civil Liberties Union summarizes its policy on this matter:

> [I]n the interest of parental right to choose an alternative to public education, [home instruction with safeguards, such as approval of curriculum or testing of the child] . . . should be extended to all jurisdictions because the state's interest in assuring minimum levels of education does not extend to control of the means by which that interest is realized.

A new wave of cases – testing not whether home-schooling should be permitted but the extent to which states may regulate it – may be on the horizon. The teacher certification requirement is currently undergoing litigation in the three states that require it, and it seems likely that there will be future litigation regarding the authority of the state to regulate the content of the curriculum of home-schools as well. Anx-

Regulating the content of private educational materials is simply too intrusive under the free speech clause.

ious educators may wish to prescribe specific texts for children in home-schools or require submission of texts for approval, but either practice would raise serious questions about violation of the free speech rights of the individuals involved.

The Supreme Court has indicated that states have a legitimate interest in the education of children and may specify reasonable regulations governing a private school curriculum. But the Court has never extended this dictum to state control over the selection of specific materials or to state prescription of every subject to be taught. Indeed, states have not prevailed when they have intruded too far in these areas. In the Twenties the Supreme Court struck down a Nebraska law prohibiting instruction in a foreign language and a Hawaii law that excessively regulated foreign language schools, including the textbooks that they used. Regulating the content of private educational materials is simply too intrusive under the free speech clause of the First Amendment.

The Court will allow regulation of narrowly and precisely defined categories of verbal utterances, including such speech as pornography, defamation, espionage, incitement to violence, advocating the overthrow of the government, or yelling "fire" in a crowded theater. Such utterances are not regarded as speech protected under the First Amendment. However, the materials from Accelerated Christian Education, which seem to draw the most fire from educators, appear to be fully protected under the First Amendment, either as free speech or as free exercise of religion.

Even if material is classified as protected speech, states may regulate it, if there is a "compelling state interest" sufficient to outweigh First Amendment rights. Ever since Justice Hugo Black lost his battle to persuade his brethren on the Court that the right to free speech is absolute, the Court has allowed some limits to be placed on free speech in the face of overwhelming societal need. However, the state must pursue "the least drastic means" of achieving its legitimate goal. It seems unlikely that the state's interest in the education of any child is so compelling that it would justify a state-prescribed view of history, social studies, or the world. Prescribing or censoring textbooks would be a particularly ironic way to preserve democratic ideals.

In any case, the fuss over the ACE materials seems to hinge on political and cultural differences. Some public educators will easily accept home-schooling for families living abroad or in geographically isolated areas. But they grow nervous when home-schooling is motivated by politics or religious fundamentalism. In the article by Dan Fleming and Thomas Hunt that appears in this *Kappan*, the authors do not challenge the ACE materials primarily for poor grammar, errors in spelling, lack of sequential progression, or evidence that children fail to learn from these materials. Their negative judgment rests primarily on the view of the world depicted in these materials.

To be sure, the ACE curriculum materials are politically conservative, authoritarian, and Christian throughout. Public school materials tend to be progressive, secular, and almost totally silent in their treatment of religion. *Both* contain some factual errors. The Fleming and Hunt critique of the ACE materials sounds oddly familiar to anyone who has reviewed recent critiques of *public* school materials, initiated by political conservatives, such as Paul Vitz or the Heritage Foundation. Fleming and Hunt's ultimate condemnation of ACE – failure to stimulate critical thinking – is the same criticism of public school history texts offered by Frances FitzGerald in her witty and troubling book, *America Revised*. In at least one way, the ACE materials are better than many public school texts: they tackle topics from recent history that public school texts often avoid because they are controversial.[5] As FitzGerald observed, when a topic provokes too much disagreement, it fails to survive the official and unofficial reviews that leave public school texts bland, dull, and strangely silent in certain areas.

The courts will uphold reasonable state regulations, of course. Although guiding precedent from the High Court is lacking, there is little doubt that states have the right to request data from home-schools. States may also be able to set a minimum length for the instructional day and year. And many states do choose to test the children. States could probably also prescribe reasonable standards for teachers in home-schools – for example, some form of competency testing, or a high school diploma to teach young children and a college degree for older children (assuming the state had evidence that these things affect learning).

But it is not clear that states can show

". . .the household robot laughed to see such sport and the microprocessor ran away with the cellular phone."

sufficient justification for requiring teachers to be certified. Nor is it likely that states could require both testing of the children and of the teacher *as criteria for acceptance of the program*. (Public schools, after all, are not shut down if the children *or* the teachers fail to test above a minimum level.) The most flexible approach would permit several different options by which home instruction could be approved.

BUILDING COOPERATION

Much could be gained by building cooperative relationships between public school officials and home-schoolers. Better ties would facilitate answering questions about the numbers of children involved in home-schooling and could help identify the rare cases of child abuse or neglect. More important, cooperative ties could enrich our understanding of child development and learning. Much could be learned from those who provide substantially different learning environments, particularly those families pursuing a less-structured, more child-directed approach to schooling. We could study such things as the comparative effects of one-to-one versus larger student/teacher ratios; the effects of peer pressure; the effects of different contacts with adults; the relative efficiency of untrained parents and trained, certified teachers; child-directed versus teacher-directed programs; and so on.

Unfortunately, home-schoolers sometimes see public educators as crass opportunists, interested in their children only for the sake of the federal and state dollars they represent. Or worse, they see public educators as depraved characters seeking to mold other people's children in all the wrong ways. Some home-schoolers act on these conclusions and refuse to cooperate with even the most innocuous requests for information. Others carry their preference for parent-led programs so far that they refuse professional supervision, even when it is required for objectivity, as in the administration of tests.

On the other hand, some public educators seem to feel that only public schools can achieve the public's goals for education. They find home-schools even more subversive than private schools. A few state and local educators vigorously oppose home-schooling because they believe it is unsound educationally; they dismiss evidence of above-average academic achievement as incomplete. Some public educators cite isolated cases of child abuse, apparently assuming that these are typical of home-schooling and could be prevented by requiring all children to attend a recognized public or private school. Better data collection and more contact with home-schoolers should help resolve the objections of these educators.

Stated baldly, public educators face a choice: have no contact with the home-schooling movement (which would suit some home-schoolers fine) or work to build mutual trust, friendship, and respect. In addition to the constitutional difficulties discussed above, regulating the intellectual fare that parents provide for their children is difficult as a practical matter. Even in the recent past, when most states viewed home-schooling as illegal, they failed to enforce their own laws. Parents often went underground or moved to a state whose laws were more favorable. Sometimes, as happened recently in the state of Washington, prosecutors refuse to take cases against home-schoolers.

Public educators must now deal with the increased numbers and greater political sophistication of home-schoolers. Last year, well over a thousand home-schoolers and their supporters attended a key meeting of the state board of education in Texas to review proposed regulations – even though at the time the board regarded the parents' choice as illegal. Lobbying efforts before state legislatures in other states have succeeded as well.

A loose nationwide network of home-schoolers has formed, aided by the efforts of Holt Associates, Dorothy and Raymond Moore of the Hewitt-Moore Child Development Center, and other organizations that compile mailing lists of home-schoolers and supporting organizations. Some of the supporting organizations have become highly sophisticated in dealing with public officials. For example, the Home-School Legal Defense Association, which currently serves about 3,000 families (for an annual fee of $100), represents parents for no additional charge if they face legal action because of their home-schooling efforts. The organization also provides legal materials, maintains an up-to-date compilation of state policies, and will provide testimony before state legislatures.

It is not clear that states can show sufficient justification for requiring teachers to be certified.

All of this means legal and political difficulties for states that strictly regulate home-schooling. A realistic approach for states would be to recognize home-schooling and then work to build bridges to the home-schoolers, to increase reporting, and to provide assistance when needed. Given a more favorable legal and political environment, it becomes possible to develop positive public/private educational efforts.

Responsible parties in both the public and the private sectors have recognized how hostile attitudes can undermine broader social goals, and some have taken steps to overcome this. For example, Learning at Home, a nationwide supplier of material and a support group for Hawaiian home-schoolers, distributes a two-page information sheet that walks parents through the steps required to conform to Hawaii law. Part of the advice is of the following sort:

> Please remember when you deal with school officials that, to them, you represent home-schoolers. If you approach them respectfully and with confidence . . . they will be reassured that you are going to be a responsible parent and take care of your child's education. . . . We have found that any sensible educational plan presented with *confidence* and *civility* to local principals is eventually accepted if those official procedures are followed.

Such admonitions to home-schoolers, when they are taken to heart, greatly aid the development of friendly, cooperative relationships.

The greater burden of building bridges should fall on public officials, because they are the professionals in the partnership. When large numbers of home-schooling families appear hostile, public educators might organize a series of nonthreatening meetings, held in neutral settings. Intermediaries – legislators, private school leaders, academics – might help make the initial contacts.

The first meetings should focus on topics about which agreement is possible, such as "Goals for Our Children," and no one should expect much more from these initial meetings than a willingness to communicate. (This approach has been used by the U.S. Department of Education's Office of Private Education, which sponsors Koffee Klatches for public and private school officials. Charles O'Malley, director of the office, has observed that, at the first meeting, "It was Thursday, and we had coffee and doughnuts. When the meeting ended, all that we could agree on was that it was Thursday and that we had had coffee and doughnuts.") Later, as the participants become more willing to engage in discussion and as mutual understanding grows, the agenda may turn to substantive issues.

Ideally, public officials and home-schoolers can make a peace that permits cooperation on the real business at hand – educating children. At a minimum, local school officials could open such school facilities as laboratories, libraries, athletic facilities, and testing services to home-schoolers. They could also admit home-schooled children to such classes as band and choral singing, in which group instruction is essential.

Even now, a number of state and local education agencies permit, and even encourage, part-time enrollment. (The state department of education in Washington has just begun to compile data on such matters and has found that 64 of 1,509 home-schoolers requested part-time courses when they registered their programs.) Local districts can include such youngsters in their attendance reports for calculating state aid. Enterprising private schools might also consider part-time enrollment options for home-schoolers.

Individual leadership plays a key role. For example, a district superintendent in the state of Washington offered to assist parents engaged in home-schooling (at a time when state law officially forbade it) by enrolling them in school and providing support and materials for the home programs. He managed to keep well-informed on the progress of the children in these programs, he gained high credibility with the parents, and he kept his state aid.

The greater burden of building bridges should fall on public officials, because they are the professionals in the partnership.

Or take another example. Calvin Frazier, commissioner of education in Colorado, agreed to participate in a series of meetings with attorneys and legislators and through such efforts settled 10 lawsuits with home-schoolers. Not content to stop there, when he heard that some parents were truly fearful of him, he invited them to coffee. By being accessible and understanding, he overcame their reluctance to file the formal reports required by state law. (To his surprise, he discovered that all the parents wanted him to do was to agree that they had a constitutional right to engage in home instruction.) From this informal meeting, Frazier organized a state-level advisory committee on home instruction and recruited members from among the parents who had joined him for coffee.

By extending a helping hand, these public officials and others like them have been able to gather more information on home-schooling programs. More important, they are able to help their states channel the dedication and idealism of these individuals into educational efforts. The result will probably be children who are educated to be different. But such differences can ultimately stimulate the intellectual development of the nation.

---

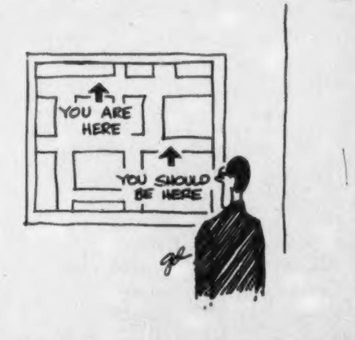
1. This and other information gathered for this article comes from informal interviews, information gathered at conferences, and correspondence over the past three years. While I have had more than 200 such contacts, the following individuals proved especially helpful: Marie Della Bella, Director, Private Education, Connecticut Department of Education; Merrill Hall, Head Master, Calvert School, Baltimore, Md.; Sylvia Hare, Abilities Research Associates, Morongo Valley, Calif.; Michael Farris and Chris Klicka, Home-School Legal Defense Association; Barbara Lawson, Windsong Life School, Anaheim, Calif.; Dick Luther, Director, Home Correspondence Division, State of Alaska; Michael J. McHugh, Christian Liberty Academy, Arlington Heights, Ill.; Barbara Mertens, Director, Private Education, Washington State Office of Public Instruction; Pat Montgomery, Head Mistress, Clonlara School, Ann Arbor, Mich.; Raymond and Dorothy Moore, Hewitt-Moore Child Development Center, Washougal, Wash.; James Pritchard, Accelerated Christian Education, Lewisville, Tex.; Steve Stephens, State Testing Coordinator, Arizona Department of Education, Phoenix; Ted Wade, Gazelle Publications, Auburn, Calif.; Arlon Widder, American Christian Schools, Colleyville, Tex.; and Darlene Wicks, Education Administrator, Centralized Correspondence Study, State of Alaska Department of Education.

2. I chose to focus on the K-8 population because high school correspondence courses reach many adults as well as school-aged children.

3. Some of the organizations listed in Table 1 serve school-aged children through 12th grade but do not ordinarily serve adults. Accelerated Christian Education believes that 40% of the users of its curriculum materials are in grades 9-12. The School of Home Learning has 22 out of 102 children at the secondary level. The Pensacola Christian School estimates that between 20% and 25% of its correspondence students are in grades 9-12. Alaska reports that 456 of its 1,254 school-aged correspondence students in 1985-86 were in grades 9-12.

4. This method of estimation was chosen because it was inexpensive, while still likely to have some validity. Many factors could distort the estimate, however. For example, I have no doubt failed to identify all sources of curricular materials and support for home-schoolers. I also suspect that two of the organizations reporting no children actually had some but were fearful of reporting it. Then, too, there is no way of telling exactly how many children use "hand-me-downs" or photocopies of curricular materials (most home-schoolers have more than one child involved in home-schooling). All in all, my estimate is probably understated, but I hope it can serve as a preliminary guide to public policy makers and to the research community.

5. This observation should not be construed as my endorsement of the ACE materials as a whole. I only wish to point out that even public educators could learn something from examining what ACE does. K

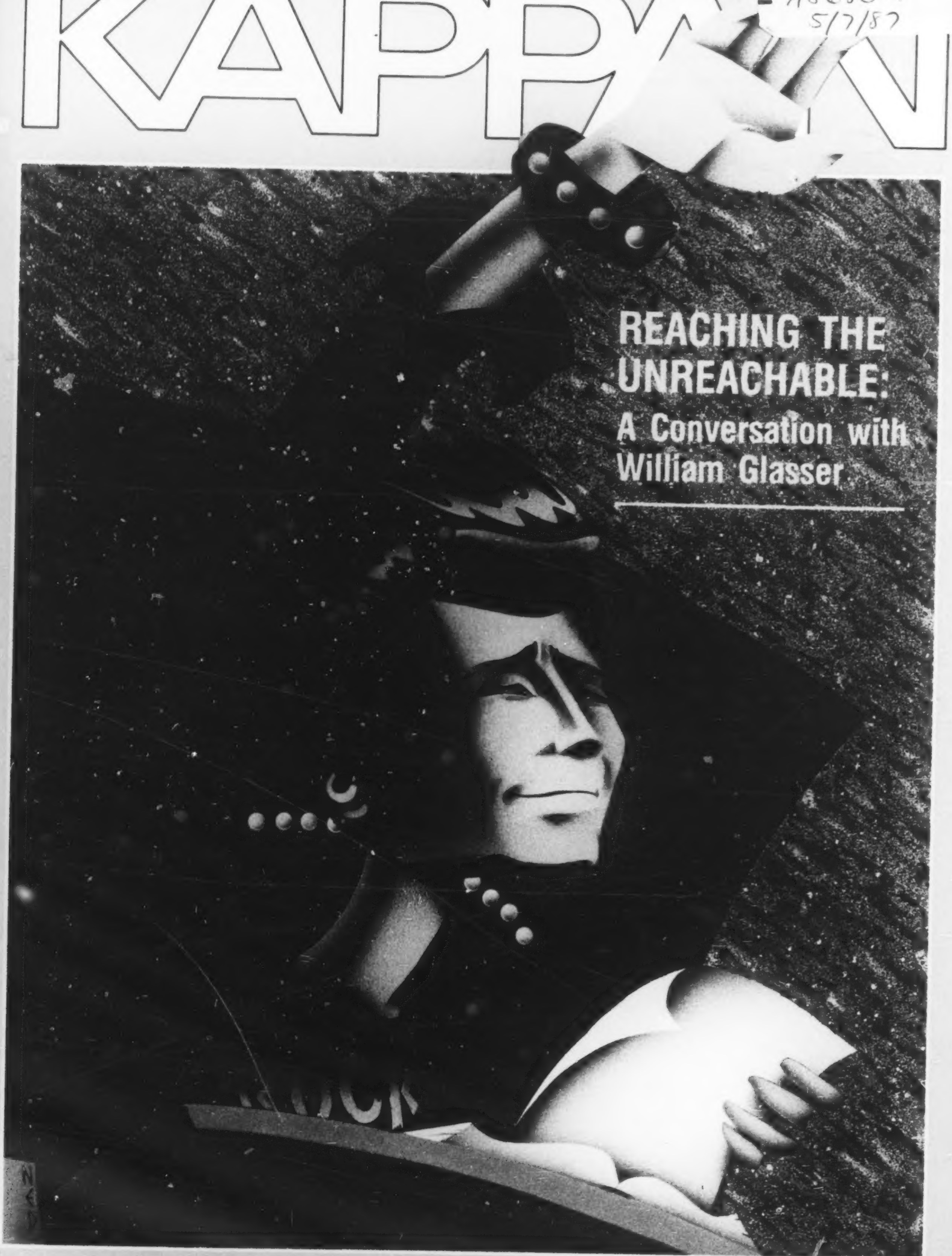


PHI DELTA

KAPPAN

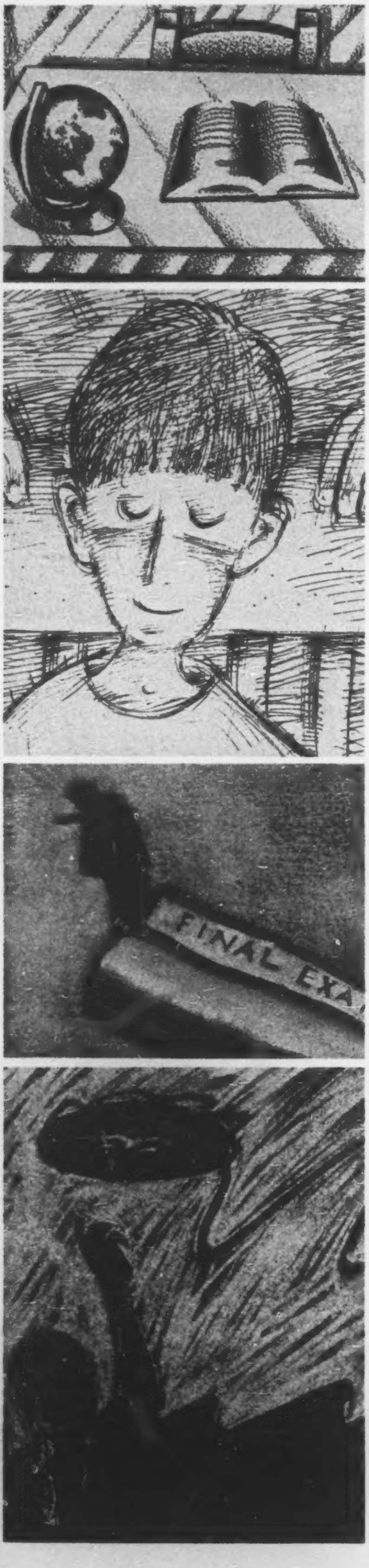
MAY 1987

A8680-1 A
5/7/87



REACHING THE UNREACHABLE:

A Conversation with William Glasser



Phi Delta KAPPAN
May 1987 • Volume 68 • Number 9

FEATURES

656 **The Key to Improving Schools: An Interview with William Glasser,** *by Pauline B. Gough*

663 **A Teacher's Views on Cooperative Learning,** *by Roy A. Smith*

667 **Character Education and Clinical Intervention: A Paradigm Shift for U.S. Schools,** *by Perry London*

674 **Teaching Selflessness in a Selfish Society,** *by Thomas J. Lasley*

679 **The Merits of Measurement-Driven Instruction,** *by W. James Popham*

683 **Measurement-Driven Instruction: Catchy Phrase, Dangerous Practice,** *by Gerald W. Bracey*

687 **Muddle-Minded Emotionalism,** *by W. James Popham*

688 **The Muddles of Measurement-Driven Instruction,** *by Gerald W. Bracey*

690 **Taking the Terror Out of Research,** *by Robert Gable and Vincent Rogers*

696 **Laser Videodiscs in Education: Endless Possibilities,** *Royal Van Horn*

KAPPAN Special Report – Schoolchildren and Drugs: The Fancy That Has Not Passed, *by Richard A. Hawley*

DEPARTMENTS

650 **THE EDITOR'S PAGE,** Trickle-Down Recognition

652 **WASHINGTON REPORT,** *by Anne C. Lewis*

654 **STATELINE,** *by Chris Pipho*

701 **RESEARCH,** *by Gerald W. Bracey*

705 **DE JURE,** Supreme Court Holds That Contagious Diseases Are Handicaps, *by Thomas J. Flygare*

707 **IN EUROPE,** International Schools for International People, *by Michael G. Bruce*

708 **PROTOTYPES,** One Community's Response to the Dropout Problem, *by Genevieve H. Arnold and Vicki Biggers*

709 **BOOKS,** *Laurence D. Brown*

711 **NEWSNOTES**

718 **BACKTALK**

Cover Illustration: Ned Shaw

MDI PRO/CON

The Merits of Measurement-Driven Instruction

Measurement-driven instruction is the most cost-effective way of improving the quality of public education, claims Mr. Popham, one of its most stalwart defenders. Following this article, Gerald Bracey looks at MDI in a less flattering light.

BY W. JAMES POPHAM

IF PROPERLY conceived and implemented, measurement-driven instruction currently constitutes the most cost-effective way of improving the quality of public education in the United States. That's a pretty hefty claim. Let's see if the evidence supports it.

Of course, other effective ways of boosting the quality of public schooling exist. For example, if we were able to replace mediocre instructional materials with more potent, empirically proven alternatives, then pupils would surely benefit. Similarly, if we were to infuse into our current teaching force a host of well-paid, highly skilled teachers, we could surely expect major educational dividends.

But such strategies, though they are surely *effective*, are very costly. Because measurement-driven instruction (MDI) is an effective improvement strategy that is markedly less expensive, it is a far

---

W. JAMES POPHAM (University of California/Los Angeles Chapter) is a professor in the Graduate School of Education at the University of California, Los Angeles, and director of IOX Assessment Associates, a Los Angeles test development agency.

Illustration by Kevin Pope

more cost-effective strategy for improving the quality of public schooling. It is a strategy for instructional improvement that American educators should consider seriously.

MDI DEFINED

Before I consider the arguments and evidence in favor of measurement-driven instruction, let me define some terms and set the stage. Starting with definitions, *measurement-driven instruction* occurs when a high-stakes test of educational achievement, because of the important contingencies associated with the students' performance, influences the instructional program that prepares students for the test. There are two major types of high-stakes tests. One category consists of examinations that are associated with important consequences for examinees. Tests of this sort include those that qualify students for promotion to the next grade or for receipt of a high school diploma. The second type of high-stakes test consists of examinations whose scores are seen as reflections of instructional quality. Such tests include the many statewide achievement tests whose results are reported by local newspapers on a school-by-school or district-by-district basis.

Few educators would dispute the claim that these sorts of high-stakes tests markedly influence the nature of instructional programs. Whether they are concerned about their own self-esteem or their students' well-being, teachers clearly want students to perform well on such tests. Accordingly, teachers tend to focus a significant portion of their instructional activities on the knowledge and skills assessed by such tests. A high-stakes test of educational achievement, then, serves as a powerful *curricular magnet*. Those who deny the instructional influence of high-stakes tests have not spent much time in public school classrooms recently.

Although with less fanfare than during the late Seventies, when many states instituted high school graduation tests, high-stakes educational tests continue to be introduced. Every month or so we hear of another high-stakes test being established. Some of the most recently established high-stakes tests are examinations that prospective teachers must pass in order to be certified. Student assessment programs in Texas and California are being expanded to include more grade levels, and in more and more states – South Carolina and Texas, for example – tests are being used as requirements for high school graduation.

DIMENSIONS OF QUALITY

As I said above, MDI can be a potent force for educational improvement if *properly conceived and implemented*. What are the attributes of good measurement-driven instruction? Although there are surely other elements that might be incorporated into an effective MDI program, meeting the following five criteria will almost certainly guarantee that a program of measurement-driven instruction will have a beneficial effect.

Criterion-referenced tests. The chief virtue of MDI stems from the clarity with which instructional targets – that is, the skills and knowledge being tested – are described. Even skillful teachers cannot target their instruction if they are unaware of what the assessment targets are. Thus criterion-referenced tests, rather than norm-referenced tests, must be employed in a program of measurement-driven instruction because the descriptive clarity of well-constructed criterion-referenced tests gives teachers comprehensible descriptions of what is being tested. Norm-referenced tests, while useful for other important educational functions, lack the descriptive clarity required for purposes of instructional design. Although teachers have a general idea of what will be tested by norm-referenced examinations, there is too much descriptive ambiguity in such tests to encourage on-target teaching.

Defensible content. If measurement-driven instruction is to enhance the quality of schooling, its tests must assess genuinely defensible skills and knowledge. Why drive instruction toward trivial destinations? Sadly, a number of the minimum competency tests adopted in the late 1970s could have been more accurately labeled "most minimum imaginable" competency tests. The content of high-stakes educational tests should be subjected to intense scrutiny by all concerned clienteles, so that the tests measure truly worthwhile content. Because of the clarity with which the content of a criterion-referenced test can be defined, rigorous judgments can be rendered about whether or not that content is defensible. It is time for U.S. educators to pursue loftier curricular aspirations – aspirations that can be embodied in a high-stakes test.

A manageable number of targets. Too many instructional targets turn out to be no targets at all. Well-crafted high-stakes tests should not be used to assess a multitude of skills or objectives. Rather, in order for teachers to give meaningful attention to promoting the content to be tested, the number of assessment targets covered by the test should be in the neighborhood of five or 10. We learned an important lesson during the heyday of behavioral objectives. Teachers who are inundated with endless litanies of minuscule instructional targets will pay heed to none. A high-stakes test must focus on only a reasonable number of important skills or knowledge targets – targets sufficiently general to subsume enabling skills and content. A number of high-stakes tests in reading, for instance, assess only five or six truly essential skills, such as finding the "main idea" and drawing the correct "inference."

Instructional illumination. Although it is not widely recognized by the education community, criterion-referenced tests can be constructed in such a way that they actually encourage teachers to design effective instructional sequences. For example, a skill that requires examinees to make sophisticated discriminations can be assessed via multiple-choice items constructed according to carefully designed, *instructionally relevant* rules. Suppose that the correct answer to a multiple-choice test item must explicitly satisfy all of three positive criteria while violating none of four negative criteria. Because teachers who are informed of these criteria will recognize the importance of students' mastering them, it is likely that the seven criteria will be emphasized instructionally. Those who develop high-stakes tests for measurement-driven instruction must conceptualize the skills or knowledge to be tested in such a way that teachers can use the targeted skills and knowledge to design effective instructional sequences. In this way, well-made tests will function as catalysts to improved instruction.

Instructional support. Appropriately crafted high-stakes tests are a necessary, but not sufficient, condition for effective programs of measurement-driven instruction. Ample instructional support must also be provided to educators so that they can make the best use

Historically, testing has been something that teachers have thought about after instruction was over.

of MDI. During 1986, for example, Texas officials provided the state's educators with guides that outlined instructional strategies for all subjects tested statewide at grades 1, 3, 5, 7, 9, and 11. For each skill to be tested, the guides contain 1) a description of the skill, 2) an illustrative test item, 3) an analysis of how the skill might be taught, and 4) potentially useful instructional activities and exercises. Such materials to support instruction are needed if measurement-driven instruction is to work most effectively.

Historically, testing has been something that teachers have thought about only after instruction was over. Tests have been employed to determine how much students have learned, so that teachers could use this information to assign grades. For most teachers, test-making has been an end-of-instruction endeavor.

But with the advent of high-stakes testing, such traditional conceptions of measurement must be jettisoned. No longer can we view test development as an afterthought. Instead, educators must reconceive the relationship between measurement and instruction, so that tests are employed as vehicles of *instructional clarification*. Because high-stakes tests will surely function as instructional magnets, the challenge is to fashion those tests so that they become a potent force for educational improvement.

IS MDI NEEDED?

There's really little need to employ an improvement strategy, such as measurement-driven instruction, if all is well in American education. Those who believe that the quality of public schooling in the U.S. today is acceptable also believe that – despite isolated instances of instructional ineptitude – teachers are generally doing a decent job, students are spontaneous and creative, and most curricula embody a meaningful number of high-level goals. If I shared this belief, I would have little need to try to enhance the quality of education through the use of measurement-driven instruction or any other tactic.

I believe, however, that the quality of schooling in the U.S. is far from acceptable. Although there are pockets of pedagogical brilliance, far too many classrooms can be found in which teaching is intolerably weak – classrooms choked with irrelevant, time-filling activities that leave hordes of students bored, unmotivated, and lacking mastery of even the most basic skills.

Whatever the causes of such ineffectiveness, its consequences are visible whenever a high-stakes test is initially installed. Far too many students know far too little. In confirming such a perception, Chester Finn, assistant secretary for research and improvement in the U.S. Department of Education, recently characterized the performance of American students as "scandalously low."[1]

Critics of measurement-driven instruction often contrast its possible ill effects with a benign depiction of the success of public schools that simply doesn't square with reality. The merits of MDI must be honestly contrasted with what currently exists in the nation's classrooms. And what currently exists in the public schools needs improvement, not applause.

RESPONSIBLE CRITICISM

Those who would have U.S. educators reject measurement-driven instruction as a strategy to improve schooling must do more than simply trot out a horror story or two about its negative consequences. Of course, any effective tool can always be misused. A scalpel that can save lives when used by a skilled neurosurgeon can become a murder weapon in the wrong hands. That possibility, however, should not incline us to outlaw scalpels.

Critics of measurement-driven instruction must demonstrate, via argument and evidence, that this improvement strategy is so fundamentally flawed that it is either *certain* or *far more likely* to have negative rather than positive consequences. Proponents of MDI, on the other hand, must show that it stands a reasonably good chance of succeeding.

Let us briefly consider some of the more commonly voiced criticisms leveled at measurement-driven instruction. For the most part, these are specious attacks, lacking both analytic rigor and empirical support.

Curricular reductionism. It is alleged that measurement-driven instruction will necessarily lead to the pursuit of trivial, indefensible goals. Of course, this is not necessarily so. Why should we believe that public school educators – who, in their typical activities, pursue high-level goals – would suddenly, when creating a high-stakes test, aim exclusively for low-level goals? Basic skills are being measured in many student assessment programs because students do not possess such skills – not because they are the only skills that could be measured. High-stakes tests need not be directed only toward basic skills. In Pennsylvania and California, for example, new statewide "honors" tests have been established that deal with genuinely higher-order skills.

Curricular stagnation. Critics claim that the use of high-stakes tests will lock educators into an unalterable pursuit of the content being assessed by the tests. But such inflexibility is not necessary. Already a number of states – New Jersey and Connecticut, for example – have meaningfully refurbished their student assessment programs in order to assess more demanding skills.

Constrained teacher creativity. Critics contend that the pressures of instructional assessment will constrain teachers' spontaneity in the classroom. Yet for every teacher the critics can find whose creativity has been stifled by high-stakes tests, I'll produce many more who, because of those tests, waste far less of

REPORT CARD
Campbell

"Some teacher! Doesn't even know the first three letters of the alphabet."

their students' time with irrelevancy and busywork. Creative teachers can *efficiently* promote mastery of content-to-be-tested and then get on with other classroom pursuits.

Lowered student aspirations. Some critics of measurement-driven instruction argue that the aspirations of students will be diminished because they will pursue only the skills and knowledge being tested. Tell that to a chemistry teacher whose students don't need to know chemistry for a statewide basic skills test. Would such a teacher be likely to implore students to "take it easy" because there's no chemistry content on the statewide test? Of course not. There's obviously more to school than what's covered on a high-stakes test. Teachers know this; students know this. And if the critics of MDI don't know it, they ought to.

Inappropriate role of tests. Some critics of measurement-driven instruction have argued that tests should follow, not lead, the curriculum. These critics contend that considering testing before determining curriculum is putting the cart before the horse.[2] It can be empirically demonstrated that a carrot-laden cart will provide a powerful incentive if placed in the path of an underfed pony. As I suggested above, educators need to abandon outmoded notions that testing must follow teaching. Properly conceptualized tests can provide the requisite clarity to make instruction more effective.

EVIDENCE OF SUCCESS

Happily, the case for measurement-driven instruction need not depend on rhetoric. During recent years a number of states and school districts have installed high-stakes educational tests in an effort to enhance the quality of local instruction. Table 1 presents improvements in the test performance of students in six states and one urban school district.[3]

Table 1 shows us that substantial improvements in student mastery of basic skills have been seen during the past half-dozen years. These percentage improvements represent the increased proportions of students who have displayed mastery of established standards – for example, a passing standard of 70% correct on a basic skills test. It is impossible to consider the evidence reported from these seven settings without concluding that, in situations in which measurement-driven instruction has been properly installed, improved student performance on high-stakes tests follows.

How would critics of measurement-driven instruction attempt to discount the sort of evidence presented in Table 1? For one thing, they would probably suggest that the skills measured by the tests aren't all that important; hence the reported gains aren't all that meaningful. But let us recall that these are *basic skills* and that improvements occur only when students display such skills who previously could not. In effect, no matter how low the level of the skills measured before the installation of measurement-driven instruction, students had not mastered them. After the advent of MDI, far more students can attain such fundamental skills.

TABLE 1.

Improvements in Student Achievement Associated with Measurement-Driven Instruction

Locale	Subjects	Grade(s)	Period	Improvement (%)*
Ala.	3 R's	3,6,9	1981-86	1-13
	3 R's	11	1983-85	4-8
Conn.	3 R's	9	1980-84	6-16
Detroit	3 R's	12	1981-86	19
Md.	3 R's	9	1980-86	13-25
	Citizenship	9	1983-86	23
N.J.	Reading and Math	9	1977-85	16-19
	Reading and Math	10	1982-85	8-11
S.C.	Readiness	1	1979-85	14
	Reading and Math	1,2,3,6,8	1981-86	12-20
Tex.	Reading and Math	3,5,9	1980-85	7-14

*Figures for improvement represent the increased percentage of students who have mastered standards of quality during the period in question. (For Alabama, in grades 3, 6, and 9, the percentage of improvement reflects test-score percentage improvements rather than improvements in mastery of standards.)

It is particularly gratifying that measurement-driven instruction is apparently reducing the performance gap between majority and minority students. For example, between 1980 and 1984 in Texas, a disparity between the reading and mathematics skills of ninth-grade black students and white students was cut nearly in half. During a similar period, dramatic reductions in the difference between the performance of black students and that of white students have been observed in South Carolina. Connecticut officials report that the greatest improvements have been seen for minority and economically disadvantaged students in urban settings. Clearly, effective assessment systems can go a long way toward reducing differences between majority and minority students in the mastery of skills.

Properly conceived and implemented, measurement-driven instruction can constitute a potent force for educational improvement. Obviously, the installation of an effective program of measurement-driven instruction is not fool's play. Care must be taken to create an assessment system that does not produce the negative outcomes feared by critics.

Remember, truly ineffectual interventions usually give but small cause for alarm. Only when an intervention is sufficiently powerful to bring about changes, possibly the "wrong" changes, does it provoke resistance. In measurement-driven instruction we have a potent and cost-effective intervention that can substantially boost the quality of schooling in our nation. It's time to use it.

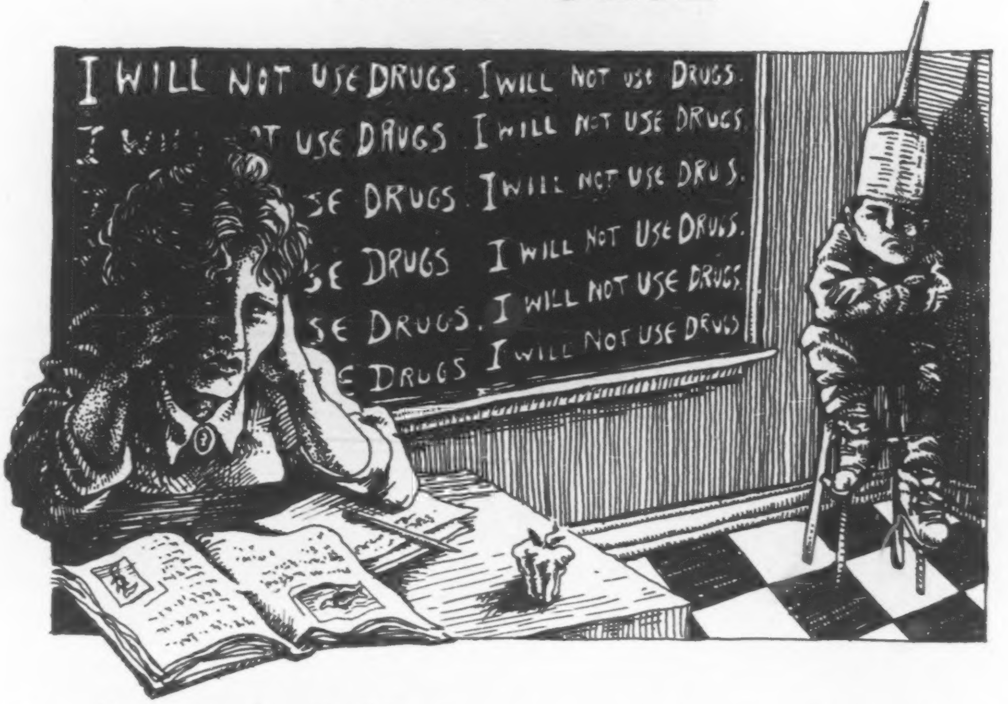
---

1. Finn's remarks were made during the Education Commission of the States/Colorado Department of Education Conference on Large-Scale Assessment, Boulder, Colo., June 1986.

2. Robert Calfee, "Establishing Instructional Validity for Minimum Competency Programs," in George F. Madaus, ed., *The Courts, Validity, and Minimum Competency Testing* (Hingham, Mass.: Kluwer-Nijhoff, 1983).

3. I am grateful to the following individuals for the information presented in Table 1: Anne C. Hess, Alabama; Douglas A. Rindone, Connecticut; Sharon Johnson-Lewis and Stuart C. Rankin, Detroit; Ann E. Chafin, Maryland; Stephen Koffler, New Jersey; Paul D. Sandifer, South Carolina; and Keith L. Cruse, Texas.

KAPPAN SPECIAL REPORT


I WILL NOT USE DRUGS. I WILL NOT USE DRUGS.
I WI OT USE DRUGS I WILL NOT USE DRUGS
SE DRUGS. I WILL NOT USE DRUS.
SE DRUGS I WILL NOT USE DRUGS.
SE DRUGS. I WILL NOT USE DRUGS
SE DRUGS. I WILL NOT USE DRUGS
E DRUGS I WILL NOT USE DRUGS

Schoolchildren and Drugs:

The Fancy That Has Not Passed

BY RICHARD A. HAWLEY

I. BACKGROUND

COME NOW, haven't we schoolpeople heard *enough* about drugs? The question is more than fair. Stories about drugs in the print media — big busts, latest threats to health, controversial testing programs, involvement of celebrities — are so ubiquitous that each new one raises little more interest than the daily weather report. And most televiewers would agree that, if Geraldo Rivera made only one documentary on the subject, it would be one too many.

But while drug-related journalism may have lost the power to engage us, the issue of school-age children altering the course of development of their central nervous systems with toxic chemicals continues to command our immediate attention. However inured to it we have become, the "drug problem" has not gone away. In many regions and in whole school systems, student drug use is virulent. Nationwide it continues to be — and this is the technically correct word — epidemic.

According to the best and most far-reaching survey, Lloyd Johnston, Patrick O'Malley, and Jerald Bachman's *Drugs and the Nation's High School Students*, more than nine out of 10 members of the high school class of 1985 had used alcohol, more than half had tried marijuana (more than a quarter reported using it in the past month), one in six had used cocaine, and one in eight had used hal-

RICHARD A. HAWLEY is director of the Upper School at University School/Hunting Valley Campus, Chagrin Falls, O. He has written frequently on drug-related issues. His latest book, to be released this month, is Drugs and Society: Responding to an Epidemic *(Walker).*

Illustrations by Joe Lee

lucinogens, such as LSD. The great majority of drug-using children in the U.S. make their initial decision to try a drug between their 12th and 16th years — or between seventh and 10th grades.

When we consider that the metabolites of some commonly abused drugs, such as marijuana, remain active in the user's system for weeks, the implications for in-school behavior and performance grow ominous. In fact, in light of the figures for "recent heavy drinking" reported by the class of 1985 (45% of boys, 25% of girls), it seems statistically unlikely that on any given day there would be many American classrooms without *several* drug-altered students glassily meeting their teachers' expectant gazes.

Educationally and developmentally, this matters. It matters even more than whether students come to school underfed and underloved. For it is easier — much easier — to feed and to love and to teach a child than it is to reverse a pattern of drug abuse once it has begun. The most toxic effects of drug use have nothing to do with short-term stupefaction, nothing to do with "being high." The most toxic effects are not felt at all. The lodging of THC from marijuana in the fatty lining of a neuron is not felt by the user, nor is a teenager's passage from "experimental" drug use to "social" use, or from "social" use to chemical dependency.

Drugs are taken for the pleasurable feelings they produce — or are rumored to produce. A drug cannot create or alter feelings without chemically altering the functioning of the brain. Unfortunately, every external chemical known to produce changes in the nervous system also *damages* that system. There are no exceptions. There are no consequence-free drugs.

But while the brain is the principal organ affected by mind-altering drugs, it is an organ ill-equipped to register its own immediate impairment. The brain has no pain receptors: poke it, squeeze it, cut it, pound it, and it will not "hurt" (although the consequences will be otherwise dramatic). Because the brain doesn't hurt when it is injured, brain damage, whether caused by tumor growth, concussion, stroke, or drug abuse, often remains undetected until brain *function* is lost: speech, memory, movement, and so on. In the case of serious stroke, head trauma, or Alzheimer's disease, such losses are dramatic, but we should be no less attentive to losses caused by the use of alcohol and other drugs, even when those losses are subtler and are distributed over a longer period of time.

Most of us have observed a person in the process of getting drunk — a progressive pickling of the cortical functions. The subtlest and most elegant functions are the first to go: awareness of nuance, appraisal of consequences, responsiveness to time, place, and circumstance. A drink or two can reduce inhibitions. A few drinks in rapid succession knock out more basic functions: judgment, speech, motor coordination. Ultimately, consciousness itself is lost in the nervous system's last-ditch effort to preserve life. Occasionally, an impulsive or inexperienced drinker will take a fatal dose before losing consciousness. Yet, despite this progressive, easily observable impairment of brain function, the brain never once says ouch.

Herein, probably, lies the tenacity of the "drug problem." The impairment caused by many widely used drugs does not become obvious until an individual has become a confirmed user. Next to inhalable solvents, alcohol is probably the crudest of the nervous system depressants; its abuse is often followed by hangover — actually an indication of a healthy system working to expel poisons. But with more complex mind-altering drugs, such as marijuana, the hangover may be gradually distributed over days and weeks. The user may not link the uneasy, irritable feeling to marijuana at all, but rather to surrounding circumstances: family life, perhaps, or school.

Only when drug use has progressed to the point where a person's disposition and behavior are noticeably altered — to the "wasted" or "burned-out" condition — is it typically classified as a problem. And for more than a decade after the initial surge of illegal drug use in the Sixties, even the most dramatically and, as it happened, irreversibly "burned-out" individuals were often extolled for having *chosen* an alternative approach to life.

Tens of thousands of youthful chemical dependencies later, we know better — or we should know better. We should also know that, from an educational standpoint, the most abusive, dependent users are not the sole manifestation of the drug problem. The drug problem includes everything along the way. It includes the once-bright suburban pot-smoker who, in an underchallenging high school program, is "doing fine." I have met, spoken with, and observed hundreds of such students in such unchallenging programs. I have seen high school juniors showing "no academic deficit" due to occasional marijuana use, as long as nothing new — nothing beyond a healthy seventh-grader's range — is required of them.

THE DESTRUCTIVE effects of student drug use on learning and on the conduct of schooling in general are by no means limited to the users themselves. Even a few drug-enervated students in a classroom will change the learning climate for everyone. Drug-altered children are largely impervious to classroom business. teachers are apt to see them as unprepared, preoccupied, hostile. Such students — and again, it only takes a few — tend to shut teachers down and push them toward less-effective teaching. Teaching drugged children is like acting or singing in the presence of hecklers or hosting a party at which a few of the guests are bent on having a bad time.

A competent teacher who works hard trying to engage chemically impaired nervous systems is working against the grain. It is no coincidence that "teacher burnout" — the term itself is derived from the drug culture — should have surfaced as a national issue directly in the wake of epidemic student drug use. It is instructive that in the mid-Seventies, when the phenomenon of "teacher burnout" emerged so explosively, teachers' salaries (adjusted for inflation) were higher, class sizes and student loads were generally smaller, and school programs were overall less routinized and rigid than they were in the relatively drug-free years before the mid-Sixties.

Drugs change the people who use them, and when the users are students or teachers, drugs change schools. The use of drugs, including alcohol, is illegal for almost all school-age children. The use of drugs also violates school rules and most household policies. Drug use and exchange is therefore always a furtive business. As such, it is an inherently divisive force in school life. It divides straight groups from using groups, divides students from the faculty and the administration, divides strict from permissive faculty members. Especially in the aftermath of an embarrassing bust, a drunk-driving death, or the publication of poor scholastic performance, drug use causes people to point fingers of accusation. School boards find principals and faculty members lax. Teachers label whole classes or whole generations hopeless. Students find the new school drug policy or newly formed parent network reactionary and repressive.

At the heart of such divisions is illegal drug use. A nearby public high school asked me to advise on a drug-related problem that had lowered student and faculty morale to the point that the continuation of the daily school program was in some doubt.

The basic problem in this school was as follows. Considerable community, school board, and administration concern had been raised about the extent of drug use and drug dealing taking place on school grounds during school hours. A student-conducted survey confirmed that more than 50% of the students used illegal drugs to some degree and that a majority of those who used drugs did so during school hours.

Administrators, counselors, and faculty members reflected on the problem and decided that the bulk of the drug traffic taking place during school hours was happening in unsupervised places, both on and off the school grounds. Thus it was decided that the school's relatively relaxed "open campus" policy, which allowed most students to study and socialize wherever they pleased — and even allowed some of them to leave campus during their unscheduled time — had to go. Supervised study halls were instituted, many of them housed in the student cafeteria and containing hundreds of students whose seats were assigned. Trips to the bathroom or to the library required a special pass. The students, as one might imagine, reacted angrily to what they perceived as "Gestapo" tactics. And the non-using students, who had enjoyed their former liberties without breaking the rules, were the angriest. In this way the new policy united the "straights" and the "heads" in anti-authoritarian indignation.

With hindsight, it is easy to see what went wrong. The "blanket" solution of enforced study halls might have been improved had the student government or an open student forum been asked to propose a solution that would 1) stop illicit drug use *and* 2) preserve appropriate student liberty. The school administration could have taken this step without in any way compromising its resolve to eliminate drug use. The students needed help in seeing that student drug use, not their repressive elders, had caused the curtailment of their liberties. And while students were rather more comfortable reviling the administration than confronting one another about drug use, it was the latter, less comfortable process that eventually improved the climate of the school.

Apart from its general effects on a school's tone and quality, drug use has particularly demoralizing effects on particular organizations and activities. Quite recently I was asked to appraise a new athletic policy being tried out by a football coach at a prestigious independent school. The coach had read about drug-related effects on student performance, had attended drug education conferences, had weighed his own recent experiences with drug-using students, and had decided that he would like to take the firmest possible stand against drugs. With approval from the administration and the athletic department, the coach explained his feelings to his players and announced the new policy: his players were to be drug-free. No compromises. Each player was to sign a pledge, indicating that he would not use alcohol or other drugs for the duration of the season and that he would remove himself, or consent to be removed, from the team if he did.

The policy sparked some controversy and also a good deal of interest and support. The coach was generally admired for his stand.

But by the time I visited the school and talked to the team, it was mid-season, and the players seemed troubled. When they were comfortable enough to speak confidentially, it was clear that the policy was not the problem, but what had happened to it. Because they liked the coach, the players had stuck to the pledge for the opening weeks of the season. Then parties and other tempting situations combined to break the resolve of some of the players. They waited to see what happened. And nothing happened. Before long, more than half of the team had broken the pledge. Students began calling the new policy a "farce." The coach himself suspected from his players' attitudes that they had broken the pledge, but he did not know for certain. Everyone was demoralized.

The coach's stand and the drug-free pledge were not the problems. The players' subsequent violations merely pointed up the real problem: the players drank and smoked pot. They either could not or would not stop — not for their coach, not for team solidarity, perhaps not for anything.

IN THE TWO decades that drug use has been a central factor in the lives of school-age children, the phenomenon has changed and "matured" in some particularly unattractive ways. Much wishful thinking and misguided editorial writing to the contrary, no healing "decline" in student drug use has taken place. But that statement needs some explaining.

Student use of illegal drugs increased steadily through the Sixties and Seventies and reached a peak for most categories of drugs in 1979-80. At that point, more than one in 10 high school students reported smoking marijuana *daily*. In the following five years, 1981 through 1985, the use of drugs by students gradually fell off — with the exception of cocaine, the use of which continues to rise.

But this recent decline should occasion only guarded optimism, at best. The real statistical story is that students in 1985 are using drugs (again, with the exception of cocaine) at about the same rate as in 1975. For example, 47% of the high school class of 1975 indicated that they had "ever used" pot; 54% of the class of 1985 indicated the same. The numbers reporting recent marijuana use (27% of the class of 1975, 26% of the class of 1985) have remained fairly constant over the past decade. It is hard to be encouraged by reported declines in drug use when the levels remain so high.

There are other general features of

TABLE 1.

Percentages of High School Seniors Saying They Had Ever Used Certain Drugs

Ever Used

	Class of										
	'75 %	'76 %	'77 %	'78 %	'79 %	'80 %	'81 %	'82 %	'83 %	'84 %	'85 %
Marijuana/Hashish	47	53	56	59	60	60	60	59	57	55	54
Inhalants	NA	NA	NA	NA	19	18	17	18	19	19	18
Amyl & Butyl Nitrites	NA	NA	NA	NA	11	11	10	10	8	8	8
Hallucinogens	NA	NA	NA	NA	19	16	16	15	15	13	12
LSD	11	11	10	10	10	9	10	10	9	8	8
PCP	NA	NA	NA	NA	10	10	8	6	6	5	5
Cocaine	9	10	11	13	15	16	17	16	16	16	17
Heroin	2	2	2	2	1	1	1	1	1	1	1
Other Opiates	9	10	10	10	10	10	10	10	9	10	10
Stimulants	NA	NA	NA	NA	NA	NA	NA	28	27	28	26
Sedatives	18	18	17	16	15	15	16	15	14	13	12
Barbiturates	17	16	16	14	12	11	11	10	10	10	9
Methaqualone	8	8	9	8	8	10	11	11	10	8	7
Tranquilizers	17	17	18	17	16	15	15	14	13	12	12
Alcohol	90	92	93	93	93	93	93	93	93	93	92
Cigarettes	74	75	76	75	74	71	71	70	71	70	69

Source: National Institute on Drug Abuse, Monitoring the Future Study, 1985.

the drug epidemic that educators should note. One is a peculiar sort of Law of Unlimited Inclusion, according to which new drugs tend to be added to the illicit pharmacopoeia, but none is ever replaced. Thus pot and LSD, two of the most commonly used novelty drugs of the psychedelic Sixties, did not replace or even diminish the use of "established," legally available drugs, such as tobacco and alcohol. Nor has the more recent boom in the use of cocaine and "designer drugs" replaced pot or LSD.

This is not to say that, regionally and even nationally, the demand for particular drugs does not vary. It does. But the preference for individual drugs does not so much come and go, as it comes and goes and comes again. Two years ago streetwise kids in the city where I live were saying that "psychedelics" (read LSD) were out. But in the wake of a single sell-out Grateful Dead concert in the area, psychedelics have come back. This isn't a street rumor; this is the report of the families, schools, and treatment centers that have had to tend this newest crop of "Dead-heads."

None of this is meant to indict or belittle the efforts to fight drug abuse made by legislators, communities, schools, and parent organizations over the past decade. What declines have occurred in certain forms of drug use are almost certainly due to a growing consensus that drug use has no part to play in healthy child development. The consensus has expressed itself in a growing resolve to confront drug use, unpleasantness and all. The job, however, is barely begun.

II. HEALTHY CHILD DEVELOPMENT

TO THOSE with a vested interest in the physical, emotional, and intellectual development of children, the drug epidemic appears to have been designed with diabolical precision. Drugs block, retard, or distort the most crucial human capacities — perception, cognition, planning, physical coordination — and the loss of function is rewarded by surpassingly pleasurable sensations.

The long-term answer is to prevent drug abuse before it begins. This means placing programs in elementary schools.

I noted above that American children are most likely to make their initial decision to try an intoxicating drug between the ages of 12 and 16: during the peak years of adolescent growth. During these years, every cell and tissue of the body is either altered or replaced altogether. Sexual potency, nearly all of one's adult skeletal stature, and the capacity for higher-order mental functions are produced during this developmental surge. The new mental attainments include the capacity to think abstractly, to interpret elaborate symbol systems (whether poetic or algebraic), and to deduce the present behavior needed to achieve a variety of future possibilities. With the exception of the first 18 months of life, adolescence is the most accelerated period of human growth. Unlike preverbal infants, however, adolescents are conscious — indeed, acutely and exquisitely *self*-conscious — of the changes they are undergoing.

Adolescents regard their new size, new sensations, and new capacities with a good deal of positive anticipation, but these same developments are also occasions for unexpected awkwardness, worry, and loss of personal control. Both the drama and the awkwardness of adolescence are developmentally necessary. Adolescents must define a new relationship to younger children and come to see themselves as former children. They must forge new relationships with their parents and with other adults in authority. There must also be an intensified relationship with the opposite sex.

So many changes would be challenging enough to manage if the onset and rate of adolescent development were uniform and predictable; in reality, though, adolescent growth is a capriciously uneven process. The appearance — seemingly always too early or too late — of adult stature, a croaking voice, a beard, breasts, or body hair can be the source of devastating self-doubt. All such changes are unbidden, and some seem revolt-

Building Drug-Free Schools

TO ADDRESS the need to bring together all the important elements of school-based drug prevention (policy, curriculum, and working with the community), the American Council for Drug Education has developed *Building Drug-Free Schools*. This four-part drug-prevention program for grades K-12 consists of three written guides and a film. It is designed to provide school administrators, teachers, counselors, parents, and other community members with detailed information and suggestions for developing a new school-based drug- and alcohol-prevention program or for augmenting an existing program. The four parts of the program are outlined below.

I. Policy. This part of the program details why drug and alcohol use is a serious detriment to education and spells out specifically which policies have proven effective in reducing drug use. It addresses curricular requirements, the role of law enforcement, and suspension, expulsion, and intervention procedures.

II. Curriculum. This part of the program provides a unique K-12 curriculum with easy-to-use and age-appropriate learning activities. It includes essential information for teachers, such as the effects of drugs on health, the "high-risk" child, and the developmental basis for a drug-prevention curriculum. The curriculum shows the importance of avoiding dangerous "responsible use" messages, and it integrates the cognitive and affective dimensions of learning.

III. Community. This part of the program outlines specific techniques for enlisting the support of parents, businesses, religious groups, the media, medical professionals, fraternal organizations, and other community groups in reinforcing the drug-free message.

IV. Three Schools: Drug-Free. This part of the program is the film that accompanies the written guides. It features the principals of three schools, who describe how a clear and consistently enforced policy, an age-appropriate curriculum, and the involvement of the community have enabled them to significantly reduce drug and alcohol problems in their schools. The 29-minute film demonstrates for administrators, teachers, counselors, school board members, parents, and other community members that the goal of a drug-free school can be achieved.

The three guides that make up *Building Drug-Free Schools* are available for $50 a set. The film is available for purchase at $275 (16mm) or $225 (videotape) or for rental at $35. For more information or to place an order, contact the American Council for Drug Education, Department K, 5820 Hubbard Dr., Rockville, MD 20852. Ph. 301/984-5700.

ing: new smells, regular eruptions of skin blemishes, oily hair, the onset of menstruation, the annoyance of irrelevant erections.

Developments that seem trivial from an adult perspective — for example, having the wrong kind of shoes — can imperil an adolescent's basic sense of well-being. Life itself has been known to hang on only slightly weightier issues: being in or out of the group, being on or off the team, being datable or not. Steering a survivable course through first love, first intimacy, finding oneself *adequate* — these are momentous challenges in adolescence. Each will arouse terrific stress, and the adaptive management of that stress *is* maturation. The only way out of adolescence is through it. Chemically anesthetizing oneself with drugs serves only to delay this maturation — or in some cases to replace it altogether — often with lifelong consequences.

ALONG WITH THE rapidly unfolding physical development in adolescence comes the capacity for new forms of thought. Measured on an electroencephalograph, an adolescent brain can put out faster, more "adult" brain waves than that of a preadolescent. Adolescents can perceive new gradations of color and musical pitch. They can see allegories in stories that were once understood only as literal narratives. Adolescents can understand whole systems (cellular systems, body systems, political systems, solar systems), make predictions about them, and draw inferences from them. Adolescents are able to pursue higher mathematics, advanced physics, and other sciences that proceed deductively from their own axioms; these theoretical disciplines need not bear any demonstrable relationship to observable reality.

The most profound capacity for moral thinking can emerge during adolescence. Cognitively, this amounts to projecting oneself imaginatively forward and backward in time, plotting hypothetical actions and their potential outcomes, referring the outcomes to feeling centers for evaluation, formulating plans, and then executing reasoned, purposeful actions.

All this staggering complexity and elegance comes into play only if adolescent development is healthy, not polluted and impaired by drugs. If we step back and take a long look, we can see child development as a continuous process in which 1) simple mental structures are superseded by complex ones, 2) exclusively self-directed motivation and behavior becomes, at least in part, other-directed, and 3) utter dependence on nurturers develops into personal autonomy and one's own capacity for nurturing. Again, this is the direction of *healthy*, not necessarily typical, development.

Healthy maturation requires a capacity for managing pleasure. In other words, pleasure must be understood as a consequence of a good, not as an unqualified good in itself. The most reinforcing sensual pleasures — such as eating and sex — have evolved, I suspect, to promote such essential human purposes as survival, reproduction, and pair bonding. The non-sensual pleasures — such as pride, elation, and joy — have no doubt evolved to promote essential personal and social goods. But when pleasure is abstracted and pursued as an end in itself, people encounter such troubles of self-indulgence as obesity, promiscuity, emotional instability, and addiction.

Aristotle addressed the role of pleasure management in child development with remarkable clarity. His prescription has been revived intermittently through the centuries, most forcefully by Montessori and Dewey. Aristotle's point was that children must be "habituated" to desirable behavior — attending to tasks, sharing, telling the truth — before they can understand theoretically the benefit of doing so. By the time a developing child is able to understand why, theoretically, "honesty is the best policy," he or she may have internalized a pattern of truthfulness or deceit that is impervious to the more recently acquired, higher-order "theory." The standard educational rewards for desirable behavior are mastery, recognition, and praise. These rewards *follow* and thus reinforce the desired behavior.

Drug use inverts the healthy model. Complex thinking becomes simpler, distorted, even pathological — and not just while the user is high. Awareness of others and of the environment is replaced by euphoric, stupefied self-centeredness. Stress management is replaced by anesthetizing bad feelings or by chemically triggering good ones. Natural controls on pleasure are circumvented by chemicals that create rewarding sensations. In this way, essential developmental processes are not only reversed, but the *loss* is rewarded by indescribably compelling pleasure.

This is the real drug problem. It is also a disease and a sure sign of cultural deterioration. Because drug use runs so directly against the aims of education, school communities should not be reluctant to reestablish controls over the environment in which developing children make decisions. As current analysts have pointed out repeatedly, we are not enjoying a scholastic Golden Age.

III. HISTORICAL PERSPECTIVE

THE USE of alcohol and other intoxicating drugs in America extends back past the European settlement of the New World. Native Americans in the Southwest used naturally occurring hallucinogens in religious rites. The earliest dwellers in the high country of the Andes used coca leaves as a medicine and to achieve religious trances. The peoples of ancient China and India used cannabis (marijuana) for similar purposes. Down through the modern centuries, neither "white drugs" (those derived from opium) nor "brown drugs" (those derived from cannabis) made much of an impact on the culture of the West, where the preferred intoxicant was alcohol, in either distilled or fermented form.

The opiates, cannabis, and, after it was chemically extracted from the coca leaf in 1859, cocaine were contained in prescription and patent medicines in the 1800s. Cocaine was tried and found wanting as a local anesthetic. Freud initially used cocaine to relieve nervous disorders, but he later vilified the drug as a destroyer of health. It is also true that small amounts of cocaine were included in the original formula for Coca-Cola, but the drug was removed shortly after the turn of the century when cocaine was identified as a threat to health. The use of alcohol has also been intermittently accepted, regulated, deregulated, prohibited, and tolerated.

So drug use itself is not a late-20th-century novelty. The novelty is the *number* of people — especially young people — who are involved. There is no historical precedent for such phenomena as millions of school-age children using cannabis, cocaine, LSD, and other mind-altering drugs.

The reason the drug epidemic erupted in the mid-Sixties probably had less to do with the contemporary issues with which it is most often linked — protest over the Vietnam war, agitation for civil rights, and frustration with a repressively structured society — than it did with the fact that millions of baby-boomers were coming of age at the same time. As the Sixties turned uneasily into the Seventies, for the first time in American history there were more people under than over 25. An unprecedented proportion of them were clustered on college campuses, where adult presence was so minimal as to be unfelt, where a world of radical brotherhood and sisterhood was less rhetoric than daily reality.

A recurrent theme of the youth culture of the Sixties was a plea to sustain adolescence, not to complete the compromising passage into adulthood. In *Do It!*, his manifesto of the counter-culture, Jerry Rubin boldly stated the general aim: "When we're thirty-five, our ambition is to act like we're fifteen." In the Sixties, to act like a 15-year-old obliged one to defy standard conventions of dress, grooming, language, and public deportment. It also obliged one, perhaps most enduringly, to flout the conventional taboos against illicit drugs, especially pot and LSD. The older, pre-Sixties beats and hipsters became models for throngs of hippies, and within a year or two the long-standing barriers that had separated drug users from straight society had broken down.

Even the best programs can be subverted by the absence of strong, clear institutional policies forbidding drug use.

From the standpoint of public health, the American drug epidemic has caused such severe problems because it had a decade's head start on any sustained, informed attempts to check it. Drugs were not merely used, they were extolled enthusiastically by the people and through music, the medium closest to the heart of the youth culture. The Beatles sang cheerily of "getting high with a little help from my friends," while the cast of *Hair* proclaimed the drug-lit profundity of "walking in space," explaining, "in this way we rediscover sensation."

Meanwhile, in 1965 a team of Israeli scientists investigating the 420-plus chemicals composing marijuana isolated the one, delta-9 tetrahydrocannabinol (THC), that is most responsible for making users high. THC was further found to have some worrisome features. It lodged itself in fatty tissues all over the body, including the brain. It blocked healthy cell function and, over time, destroyed cells. It was a poison.

By the early Seventies, a federally funded project at the University of Mississippi was growing, under government supervision, a uniform grade of marijuana (about 2% THC) to be used in animal and human tests. With uniform marijuana available for tests, reliable, replicable studies could be made of the drug's effects on behavior and on cells, tissue, and vital human systems. Beginning in the mid-Seventies, improved and more persuasive studies were available, and important research is still under way.

But by the time the scientific and medical communities had begun to voice concerns about the health effects of marijuana and other drugs, patterns of drug use and supply were already deeply entrenched. Old, discredited research claiming the relative mildness or harmlessness of marijuana clashed with claims of its dangerous toxicity. Findings from casually conducted surveys were opposed to findings about cell metabolism. Small, dubious samples of ganja-smoking Jamaican cane farmers were used to suggest the relative safety of pot smoking among North American high school students. "Experts" appeared to disagree. Confusion reigned, and under the umbrella of so much confusion and controversy, drug use continued apace, reaching peak levels among high school students by 1980.

Slowly, however, a broadly based coalition of those opposed to illegal drug use began to make itself heard nationwide. The first people to organize and to articulate an anti-drug stand have been, appropriately, the ones among whom drug use has come inescapably to rest: families, schools, the staffs of drug treatment centers. National organizations, such as the Parents Resource Institute for Drug Education (PRIDE) and the National Federation of Parents (NFP), as well as regional movements, such as the Texans' War on Drugs, have made impressive progress in making freedom from drugs a goal for families, schools, and whole communities.

Yet even so agreeable-sounding a goal as "drug-free youth" is not as easy to sell as it may seem, particularly if "drug-free" is taken to mean "alcohol-free." There are handsomely printed books and curricular programs aimed not at "drug-free youth" but rather at the "responsible use" of drugs. Indeed, even as I write, the most widely distributed curricula for drug education in the country stress making considered responses to drugs. But these programs do not come out in favor of refusing to use drugs altogether.

LET ME PAUSE for a moment. For there is perhaps no greater indication of the inroads drug use has made on contemporary thinking than the fact that authoritative voices on the national education scene are endorsing *responsible levels* of criminal, not to mention health-endangering, activity. How does this reasoning translate into other areas of problem behavior for adolescents? Why not responsible levels of vandalism, assault, or reckless driving? Teenagers have problems with these behaviors, too, though they claim far fewer lives and sacrifice far fewer futures than drug abuse does.

Am I exaggerating? Readers who feel that I'm merely knocking down a straw man should consider the following. In Ruth Eng's 1979 book for teens, *Responsible Drug and Alcohol Use*, the chapter titled "Hints for the Responsible Use of Marijuana" cautions readers to smoke with friends, to sort the seeds out of their stash, to use clean smoking paraphernalia, and to avoid burning lips or carpets.

Andrew Weil, whose 1972 paean to drug-enhanced consciousness, *The Natural Mind*, was reissued last year, also collaborated with children's book author Winifred Rosen in 1983 to produce another drug book pitched to children: *Chocolate to Morphine: Understanding Mind-Active Drugs*. The first chapter, titled "Straight Talk," begins arrestingly, "Drugs are here to stay." The authors continue, "Drug education as it now exists is, at best, a thinly disguised attempt to scare people away from disapproved substances by greatly exaggerating the dangers of these substances." Young readers are advised to "question your parents about the drugs they use. Maybe they will agree to give up theirs if you will give up yours. If you can convince them that your drug use is responsible, you may be able to allay their anxiety."

Parents, too, are given counsel by Weil and Rosen. "Don't make your child feel it is wrong to get high," they argue, because "there are no bad drugs, only bad relationships with drugs." The authors look forward to the day when drug use will be woven comfortably and continuously into the fabric of ordinary life: "We have seen parents in good relationships with marijuana let their children take occasional puffs of joints in much the same way that some Jewish parents allow their children ceremonial sips of wine."

In 1986 Susan and David Cohen, another team of writers for teenagers, wrote an accessible guide to teen drinking called *A Six Pack and a Fake I.D.* The authors make some clear attempts at fair-mindedness, and they offer some informed cautions about alcohol abuse. But they couldn't quite bring themselves to advise their readers to obey drinking laws. Of drinking parties, they write:

> If you're planning a drinking party, and your parents accept the idea, then at least try to make your party a safe, pleasant, and interesting one, instead of a drunken bash. . . . Don't overdo the amount of alcohol in the punch and don't let anyone else add to it.

If the party doesn't run too long and if provisions are made to get drunken guests home, "so far so good. You have behaved responsibly." In the book's final chapter, titled "Summing Up," there appears the incongruous caveat, "Adults who knowingly supply alcohol to minors may be liable to criminal penalties." (No doubt the publisher's legal counsel is responsible for this terse warning.)

There is a little craziness in these discussions of "responsible" law-breaking. I suspect that Weil would be both vocal and indignant if the teens (and their parents) in his neighborhood were exhorted to curtail his right of free speech or to threaten his person. Yet why, from the standpoint of those who genuinely feel that Weil is a social menace, should the laws respecting his welfare be taken more seriously than the drug laws he so energetically maligns?

It would be a mistake to dismiss the "do it anyway" drug message as a feeble cry of left-over voices from the Sixties. These books and similar school curricula continue to appear in the mid-Eighties. Nor are they the products of dingy underground presses. Macmillan brought out *Responsible Drug and Alcohol Use*, and Houghton Mifflin published both *The Natural Mind* and *Chocolate to Morphine*.

There is considerable optimism in drug education circles today about the anticipated gains to be made as a consequence of the Reagan Administration's Anti-Drug Abuse Act of 1986. If funded, this act is supposed to provide millions of dollars to schools for drug-related programs and materials.

But what materials? Very few comprehensive K-12 curricula come out clearly against the recreational use of drugs. Most of them aim to boost self-esteem and clarify values and decision making. Their stated goal is typically that students will learn to make informed, responsible choices about drugs. Most of them do not suggest that the informed, responsible thing for a child to do is to say no to drug use. In other words, there is nothing built into the new Anti-Drug Abuse Act to insure that existing patterns of drug use will not be reinforced by federal funds. It will take alert, informed school boards, principals, curriculum coordinators, and faculty members to prevent such a development.

IV. SCHOOL STRATEGIES THAT WORK

ONCE AGAIN I must stress that American education is not in the midst of a Golden Age. Schools are drug-ridden, and this is exacting an educational toll. Daunting though it may be, drug use by young people is a problem that can be beaten. Schools have been drug-free in the still-recollectable past; they can be again. Indeed, many have already begun.

Some prescriptions follow for changing the drug climate in the schools. Let me say at the outset that the policies I propose are my own passionate preferences, but they also happen to coincide with the positions of the American Council for Drug Education, the National Federation of Parents, the Parents Resource Institute for Drug Education, and the Texans' War on Drugs, among other national and regional organizations.

- **The school's commitment must be to become drug-free.** This is a basic premise and a value-laden choice. It generates one kind of policy and program; other premises — to cut down on the levels of drug use or to help students make responsible drug choices — lead to different policies and programs. Robert DuPont, one of the clearest voices in the field of drug abuse prevention, likes to tell school faculties, "Every school will have precisely the amount of drug use that it tolerates."

It is only a sign of the times that the goal of maintaining drug-free schools is sometimes challenged as "unrealistic." The very mission of universal education requires a drug-free atmosphere for learning. Schools mobilize their energies and their money impressively to remove asbestos from the learning environment. And if the lives of a student or two were threatened by toxic shock, the suspected brand of tampons and the machines that vend them would be cleared out of the schools at once. But such threats will not take even a statistically measurable toll in student health and life. Drug use, by contrast, is taking a ghastly toll right now. Practically every reader of this article is acquainted personally with a casualty, if not a fatality, resulting from drug use. Allowing such a state of affairs to exist is inhumane — and "unrealistic."

- **Leaders must endorse, articulate, and stand by a school's commitment to be drug-free.** The responsibility for changing a school's drug climate should be widely shared, but it cannot be delegated. Especially in the early stages, a tough stand on drugs will involve confrontations, dispensing bad news, and taking criticism. If the "drug problem" becomes the special assignment of an assistant district superintendent or of a school's dean of students or of a special faculty task force, those people are likely to be seen as the district's or the school's drug fanatics, and school leaders will be asked to mitigate and temper drug policies that some may find uncomfortable. Maintaining a disinterested stance and keeping a reasonable distance from the problem by delegating the making of drug policy to others will seem the easier course to a school leader. But doing so is almost certain to impede the process of ridding the schools of drugs.

- **Preventing drug abuse is easier, more educational, and more fun than remediating drug problems once they exist.** Prevention, intervention, and treatment are all essential ingredients of anti-drug abuse policies, but prevention is by far the most promising approach. Unlike older, more stable drug abusers, adolescents pass from experimental drinking bouts to full-blown chemical dependencies in a matter of months. The news from the facilities that treat young drug dependents is frankly discouraging. The majority of those who have been treated lapse back into drug abuse. Even among those who persevere and remain drug-free, the reintegration into family, school, and community is not easy. Moreover, a newly described clinical syndrome, PDIS (Post-Dependence Impairment Syndrome), suggests that recovering dependents show abnormally high tendencies to chronic illness, injuries, learning difficulties, and depression.

The long-term answer is to prevent drug abuse before it begins. Schools are most likely to succeed in achieving this aim if they allot more and better instructional time to drug education *before* children confront the choice of whether or not to use a threshold drug. This means installing programs in elementary schools. Some exercises in such programs will be very basic and prescriptive: saying no. Some exercises will be affective: how to say no and how to avoid drug use and other harmful situations. Some lessons will be informational: what is safe and what is dangerous; what are the effects on the human system of various legal and illegal drugs. Special emphasis should be given to cigarettes, alcohol, marijuana, and inhalants, because these are the most prevalent threshold drugs.

However, even the best educational programs can be subverted by the absence of strong, clear institutional policies forbidding drug use. For the great majority of school-age children, adherence to the "rules" and observance of the law are the highest categories of ethical thought. Schools tend to stress the enforcement of those policies about which they care most strongly. Drug education must go hand in hand with an anti-drug policy.

Weary voices stating that "drug education" and "information" have proved ineffectual as ways of preventing drug abuse are misinformed and mistaken. A systematic, prevention-based program of drug education has barely begun nationwide. The drug epidemic arose in the absence of such educational measures, not despite them.

- **Changing the drug climate of a school begins with building a consensus among members of the faculty and staff.** School staffs whose members are divided among themselves cannot stand firm against student drug use. They will be divided in the same way inconsistent parents are divided. Building a durable consensus is apt to require some learning on the part of faculty members about the biomedical effects of drugs and about their special effects on developing children. This learning may require some high-quality inservice training. The trainers and the materials they use should endorse the goal of a drug-free school. The entire faculty and staff (K-12) of a school system should be included in policy making and program building. Drug education is not the special business of health teachers and science teachers. The support of coaches and advisors is especially crucial to an effective school- or systemwide drug policy.

- **Faculty members and staff members must limit their own drug use to what is lawful and consistent with effective performance.** Employee Assistance Programs (EAPs) for faculty and staff members with drinking and other drug problems are increasingly common in both public and private schools. Adults who have been treated through EAPs and who have remained in their posts tend to bolster rather than undermine the overall morale of a school; at the same time, their presence underscores the school's commitment to be drug-free.

- **Drug-free means alcohol-free.** Alcohol is the principal drug of abuse among U.S. schoolchildren. It is the preferred drug of the majority of chemical dependents, and its use is more likely than any other disease, accident, or activity to lead to the violent death of young people. School faculty members must be educated to respond to the standard defenses for and denials of underage drinking: How much harm is there in a little? I don't want my son or daughter going off to college inexperienced. Well, if they're going to drink, I at least want them to do it here where I can watch them. Hell, I used to throw back a few myself. At least it's only alcohol. At least it's only beer.

Alcohol is the problem, not the form in which it is taken. A can of beer, a typical glass of wine, and a Scotch and soda served at a bar each contains about an ounce of alcohol. Two consecutive ounces of alcohol consumed by a 5-year-old can kill the child. The same dose is highly toxic to a middle-schooler. Growing children are in the process of developing controls that might allow them to drink moderately as adults; alcohol and other drugs *replace* these controls. The loss of performance, health, and life of young drinkers is well-documented and obvious. Against these losses, no positive benefits have been adduced. Camaraderie? Fellowship? Go *observe* the middle-schoolers in the basement rec room or the high school crowd at the rumored three-kegger at the home of a student whose parents are out of town. Observe, and perhaps clean up.

V. A PERSONAL NOTE

ALTHOUGH MY professional responsibilities are to direct a high school and my out-of-school preoccupations tend to be literary and musical, over the past 10 years I have done a good deal of writing, speaking, and conferring about drug-related issues. I never intended to do this, but, given my involvement with young people, I suppose an immersion in drug issues was inevitable. Sometimes I do wonder, though, whether I am coming to see the world through a drug-clouded lens. I have met some people who, it seems to me, have reduced all the world's problems to the drug abuse of American teenagers.

I don't want to become this way, and I try hard to maintain my balance. But I do read the paper. And on the morning that I wrote this paragraph these were the headline stories in the *Cleveland Plain Dealer*.

The leading national news was the revelation that the crew members of the Conrail train that collided disastrously with an Amtrak passenger train were under the influence of marijuana. Locally, the dominant story was the continuing investigation of a convicted drug dealer and police informant who apparently received protection from the Cleveland police force to sell cocaine in the inner city, provided he turned the profits over to the department, which then used the funds to pay for the biggest drug bust in the city's history. A curious sort of ethic at work here.

The sports coverage was replete with Brian Bosworth's indignation that his use of steroids had barred him from NCAA football competition. He claimed that pot-smoking athletes got away with murder because their positive drug tests could be interpreted as "passive inhalation" of other people's smoke.

As I said, I was pressed for time and had to get moving, but I glanced at one more story, one that was given less prominence. It summarized a survey of internationally prominent education experts who were asked to appraise the relative effectiveness of the teaching in six nations of math, science, social studies, foreign language, and each nation's own language. Japan and West Germany were rated highest; the U.S. fared poorly. In math and science we were ranked second to last, and in the teaching of our own language we ranked last.

Hmm. Television? Affluence? Poverty? Permissiveness? Restrictiveness? Outmoded pedagogy and curricula? Existential ennui? Angst? Ask on. K

NOTE

ONLY THE FOLLOWING PAGES OF THIS

PUBLICATION HAVE BEEN FILMED

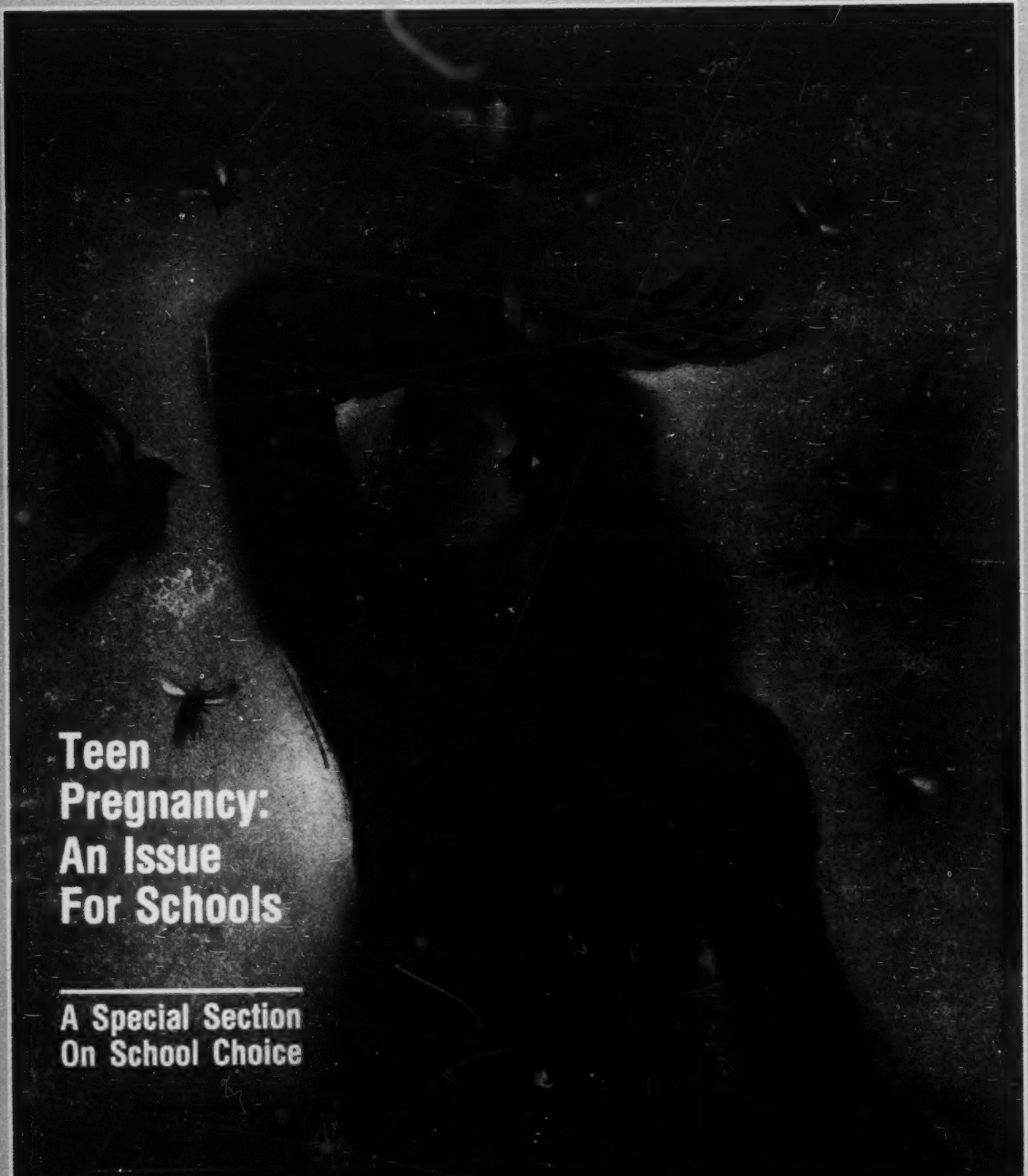
Cov. 1, pgs. 723, 728-736

PHI DELTA

KAPPAN

JUNE 1987

A8680-1 A -
6/15/87



Teen Pregnancy: An Issue For Schools

A Special Section On School Choice

Phi Delta June 1987 • Volume 68 • Number 10

KAPPAN

FEATURES

728 **Teen Pregnancy: An Issue for Schools,** *by Asta M. Kenney*

737 **Teen Pregnancy: It's Time for the Schools to Tackle the Problem,** *by James Buie*

740 **Abuse in the Name of Protecting Children,** *by Robert L. Emans*

744 **A Personal Legacy,** *by Lois Distad*

746 **Results and Future Prospects of State Efforts to Increase Choice Among Schools,** *by Joe Nathan*

753 **Central Park East: An Alternative Story,** *by Deborah Meier*

758 **Inside a School of Choice,** *by Robert L. Fizzell*

761 **Choice: The Parents' Perspective,** *by Van D. Mueller*

762 **Public Choice, Yes; Vouchers, No!,** *by Mary Anne Raywid*

770 **State Residential High Schools for Mathematically Talented Youth,** *by Julian C. Stanley*

773 **The North Carolina School of Science and Mathematics,** *by Charles R. Eilber*

778 **Increasing Teachers' Understanding of Mathematical Ideas Through Inservice Training,** *by Thomas L. Good and Douglas A. Grouws*

784 **Let's Not Throw Out the Baby with the Bath Water,** *by Dorothy Rich*

786 **A Matter of Interpretation,** *by Shirley Brice Heath and Milbrey Wallin McLaughlin*

787 **Combining Categorical Program Services Can Make a Major Difference,** *by Norm Felix, Forest Hertlein, David McKenna, and Robert Rayborn*

DEPARTMENTS

722 **THE EDITOR'S PAGE,** Sexual Double Talk

724 **WASHINGTON REPORT,** *by Anne C. Lewis*

726 **STATELINE,** *by Chris Pipho*

789 **PAR,** Teenage Pregnancy, *by Mary C. McClellan*

792 **DE JURE,** High Court Splits on Search of Public Employee's Office, *by Thomas J. Flygare*

794 **IN CANADA,** Internships in Alberta, *by Tom McConaghy*

796 **PROTOTYPES,** Life in Remedial English: Learning About Teaching and Learning, *by Lionel Forstall*

798 **BOOKS,** *Laurence D. Brown*

800 **BACKTALK**

806 **INDEX, Vol. 68**

Cover Illustration: Cary Henrie

Teen Pregnancy: An Issue for Schools

Issues related to teen pregnancy are becoming increasingly important to the schools. Ms. Kenney provides a comprehensive overview of the kinds of programs that schools either have adopted or could adopt to combat this problem. Broad-based support is crucial.

BY ASTA M. KENNEY

ABOUT 65% of school administrators view teen pregnancy as one of the top 10 problems facing their school systems.[1] Considering that more than four out of 10 young women in the United States become pregnant before they turn 20, this is hardly surprising.[2]

Several factors have contributed to the growing recognition of the severity of this problem by educators and the public at large. First, major research studies in the 1970s and 1980s have brought out the fact that sexual activity and pregnancy among high school students can no longer be considered "deviant." About half of U.S. teenagers are sexually active by the time they leave school, and one in four young women has experienced a pregnancy.[3]

Furthermore, even though fewer teens are having babies today than a decade or two ago, the problem has become more "visible" in the schools. Since the enactment of Title IX of the Education Amendments of 1972, which protects students in federally funded education programs against discrimination on the grounds of pregnancy or parenthood, pregnant students and young parents have been entitled to remain in school. In addition, young mothers today are less likely to give up their babies for adoption, so that adolescent parents are usually caring for an infant at the same time as they are seeking to acquire a basic education.

ASTA M. KENNEY is an associate for policy development with the Alan Guttmacher Institute, Washington, D.C. She wishes to thank the Center for Population Options and the Children's Defense Fund for their work in identifying model programs that address teenage pregnancy.

Ten or 15 years ago, teenage pregnancy and childbearing were viewed primarily as health problems. They are certainly that – teens and their infants are significantly more likely to suffer death and complications in childbirth than women who postpone childbearing into their twenties. But there is a growing recognition that the risks can be mitigated through proper health care, particularly prenatal care and nutrition.

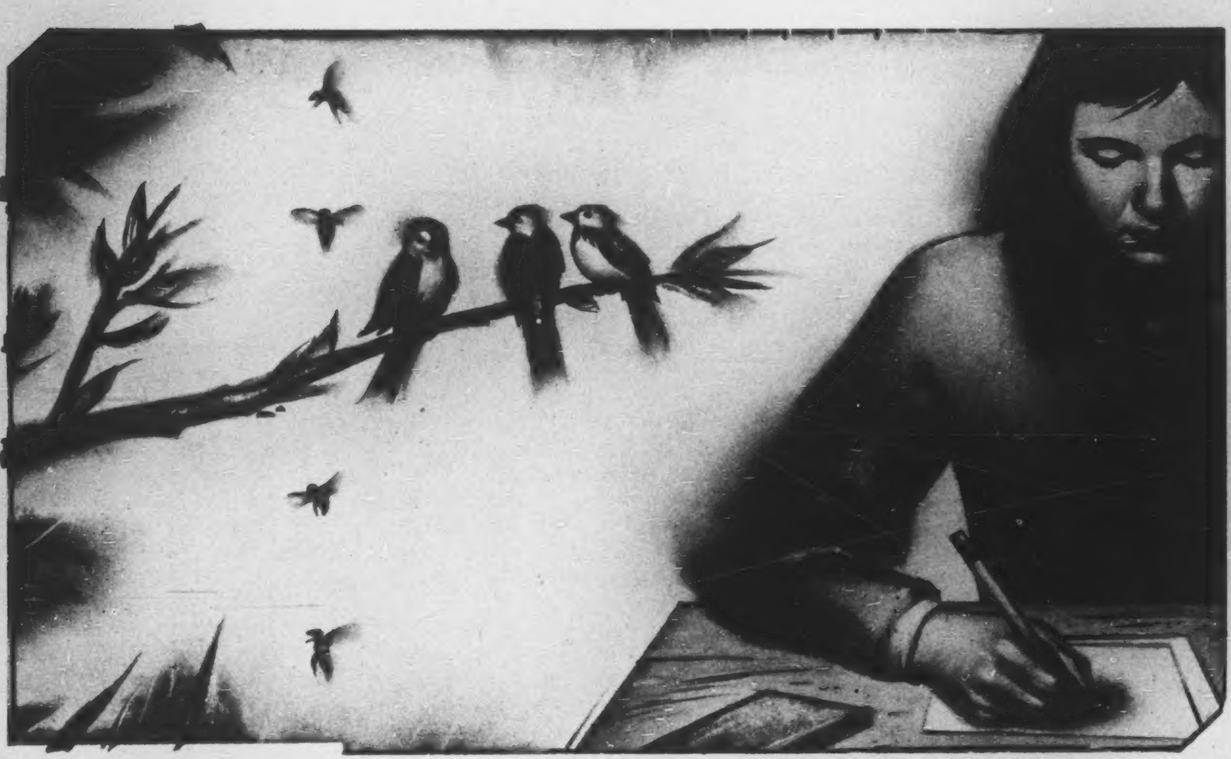
More recently, public concern has begun to focus on teenage childbearing as one of the root causes of poverty. Teen parents are often school dropouts, and, as a result, they face difficulties in obtaining the skills needed to compete in society. Thus they are disproportionately likely to find themselves in low-paying jobs or dependent on welfare for support.

Even when socioeconomic background, academic ability, and motivational factors are taken into account, early childbearers are less likely to graduate from school and more likely to suffer other educational deficits. Although many young mothers resume their education later in life, they generally do not catch up with the women who postpone childbearing.

Using data from the National Longitudinal Survey of Work Experience of Youth, Frank Mott and William Marsiglio studied the childbearing experience of women aged 20 to 26.[4] They found that only half of the women who first gave birth at age 17 – and even lower proportions of those who gave birth at a younger age – had completed high school by their twenties (see Table 1). Among young women who waited until age 20 to have a baby, by contrast, 90% had obtained a high school education. Moreover, among the younger teen mothers, almost half had obtained a General Equivalency Diploma (GED), which may not always open up the same employment opportunities as a high school diploma. Teenage fathers are also negatively affected, but not as severely as teenage mothers.[5]

These educational deficits have consequences for the young women themselves and for their children. Teen parents are more likely than those who delay childbearing to have low-paying, low-status jobs or to be unemployed. The mean family income of white women who give birth before age 17 is about half that of families in which the mother delays birth until her mid- or late twenties. The younger the mother at childbirth, the lower her annual family income.[6]

Although this financial disadvantage



tends to diminish over time, it is aggravated by the fact that teen mothers often have larger families to support with their more modest incomes.[7] As a result of their poverty, they are disproportionately likely to depend on public assistance for support. Approximately half of Aid to Families with Dependent Children (AFDC) payments are to households in which the mother was a teenager at the time she first gave birth. A 1985 study estimated that in that year alone teen childbearing cost the federal government $16.6 billion for cash assistance, food stamps, and medical care for women who first gave birth as teens.[8]

Teen childbearing also has implications for family structure and stability. Increasingly, teenagers who give birth are not married.[9] Of those who do marry, pregnancy is often the reason – one-third of brides under age 18 are pregnant. But these early marriages are highly unstable,[10] and most adolescent mothers will spend at least some portion of their lives as single parents – a family structure that is closely correlated with poverty.[11]

TABLE 1.

Percent Distribution of Women, Aged 20-26 in 1983, By Type of High School Completion, According to Age at First Birth

Age at First Birth	High School Completion by 1983 Total %	Diploma %	GED %
15	45	24	21
16	49	28	21
17	53	38	15
18	62	52	10
19	77	68	9
Under 20	90	86	4

Source: Frank L. Mott and William Marsiglio, "Early Childbearing and Completion of High School," *Family Planning Perspectives*, September/October 1985, p. 234, Table 3.

Because education is associated with parenting skills and child development, the children of teen parents also suffer. They tend to score lower than the children of older parents on standardized intelligence tests, and they perform less well in school. One study found that, among children of adolescent mothers, every additional year of education for the mother reduced the likelihood that the child would be retained in grade by almost 50%. The children of teen parents are also more prone to exhibit mild behavioral disorders and to experience emotional problems.[12] Later in life, they are more likely to become teen parents themselves.[13]

Teen parenthood is not always a recipe for disaster, of course. But the odds weigh heavily against these young people, and they need the support of their families, their communities, and their schools to help them overcome the host of obstacles they face.

INCIDENCE OF TEEN PREGNANCY AND CHILDBEARING

The teen pregnancy rate in the U.S. is one of the highest in the western world: more than twice as high as the rates in England, France, or Canada; almost three times as high as the rate in Swe-

Illustration by Cary Henrie

den; and seven times as high as that in the Netherlands.[14] Each year, one out of every 10 teenage women in the U.S. becomes pregnant. This means that there are more than a million teen pregnancies a year, and eight out of 10 of these pregnancies are unintended.[15] The only bright spot in the picture is that the teen pregnancy rate (the number of pregnancies per 1,000 teenage females), after increasing somewhat during the 1970s, has leveled off and may even be beginning to decline.[16]

The reason for the high rate of teen pregnancy in the U.S. is that large proportions of teenagers are sexually active and many either do not use contraception or use it sporadically or ineffectively. Table 2 shows that by age 18, 44% of the young women and 64% of the young men are sexually experienced.[17] The rates of sexual activity among teens increased dramatically during the 1970s, but they appear to be stabilizing or decreasing in this decade.[18]

TABLE 2.

Percent of Young People Sexually Active At Specific Ages

Age	Women %	Men %
15	5.4	16.6
16	12.6	28.7
17	27.1	47.9
18	44.0	64.0
19	62.9	77.6
20	73.6	83.0

Source: National Research Council, *Risking the Future: Adolescent Sexuality, Pregnancy, and Childbearing* (Washington, D.C.: National Academy Press, 1987), Table 2-6.

The increased rates of sexual activity among teens have not led to drastic increases in the rates of teen pregnancy, because greater proportions of adolescents have been using contraception.[19] By 1982, 85% of sexually active teenage females had used contraception at some time,[20] but almost 40% used contraception only sporadically.[21] Moreover, since most teenagers wait almost a year after becoming sexually active before they seek medically supervised contraceptive care,[22] almost half of first teen pregnancies occur within six months of an adolescent's first sexual encounter.[23] Shortening the delay between first intercourse and the use of effective contraception could reduce teen pregnancy rates significantly.

Not all teen pregnancies result in a live birth, of course. As Table 3 shows, about 47% of teen pregnancies end in birth, while 40% are terminated by abortions and 13% result in miscarriages. The younger the teenager, the more likely she is to seek an abortion rather than carry the pregnancy to term.[24]

There has been a dramatic decline – about 25% – in the teen birthrate since 1970.[25] This is due partly to improved contraceptive practice by sexually active teenagers and partly to the legalization of abortion nationwide in 1973. More than half of all births to teenagers occur out of wedlock, and the nonmarital birthrate continues to show steep increases.[26] This trend is due to the decreasing likelihood of marriage among pregnant teens,[27] who appear to be reluctant to compound the problem of an early, unplanned birth with a marriage that is highly likely to break up. In addition, few unmarried mothers give up their infants for adoption these days: in 1982 less than 5% did so.[28]

TABLE 3.

Estimated Pregnancies and Pregnancy Outcomes, 1983 (in Thousands)

Age	Pregnancies	Births	Nonmarital Births	Abortions	Miscarriages
Under 15	29.8	9.8	8.8	16.4	3.6
15-17	390.3	172.7	116.6	166.4	51.2
18-19	649.3	316.6	144.6	244.9	87.8
Total Under 20	1,069.4	499.1	270.0	427.7	142.6

Source: National Center for Health Statistics, "Advance Report of Final Natality Statistics, 1983," *Monthly Vital Statistics Report*, vol. 36, no. 6, supplement, 20 September 1985; and Stanley K. Henshaw, "Characteristics of Women Having Abortions, 1982-1983," *Family Planning Perspectives*, January/February 1987.

It is unclear what accounts for these trends. Teenagers, of course, are part of a broader society in which sexual activity and childbearing outside of marriage have become far more prevalent than they used to be. It is also clear that teenage sexual activity, pregnancy, and childbearing are not confined to poor, inner-city populations. Rates of sexual activity among white teens have increased faster than rates among black teens, and the increase in births to unmarried teens is entirely attributable to whites.[29]

The likelihood of a teenager's becoming sexually active or becoming pregnant prematurely has less to do with socioeconomic status than with the individual teen's values, goals, and aspirations in life and with the kind of family environment in which she is raised.[30] However, the poorest, most vulnerable minority teens *are* disproportionately likely to carry a pregnancy to term and to keep the infant[31] – possibly because teenagers from more affluent families can afford abortions while Congress continues to deny federal funding for abortion to low-income women in all except life-threatening cases.

It is clear, though, that teenagers (especially girls) who see a future for themselves are less likely to become sexually involved at an early age, are more likely to use contraception effectively if they do have sex, and are less likely to bear a child if they become pregnant.[32] A 1982 Northeastern University study also shows a correlation between early parenthood and academic ability. Older teenage females with poor basic skills are 2½ times as likely to be mothers as those with average basic skills; older teenage males with poor basic skills are three times as likely to be fathers. Among younger teens – those under 16 – females with poor basic skills are five times as likely to become mothers as those with average skills.[33]

A recent study that sought to identify factors that account for state-to-state differences in teen pregnancy and birthrates concluded that the broad social setting in which teenagers make – or fail to make – decisions about childbearing is extremely important in determining their chances of becoming pregnant, giving birth, or having an abortion. States in which the status of women is higher have lower teen birthrates and higher abortion rates; politically liberal states have relatively low rates of pregnancy and birth; states with large fundamentalist populations have higher birthrates; and states with high dropout rates and larger proportions of young females not graduating from high school have higher pregnancy and birthrates and somewhat lower abortion rates.[34]

Another study that compared the U.S. with other developed western nations concluded that those countries with the most liberal attitudes toward sex, the most extensive sex education programs, and the most easily accessible contraceptive services had the *lowest* rates of teenage pregnancy, abortion, and childbearing.[35]

WHAT CAN BE DONE?

Late last year, the National Research Council of the National Academy of Sciences issued a major report, titled *Risking the Future: Adolescent Sexuality, Pregnancy, and Childbearing*.[36] This report concluded that programs and policies designed to address adolescent pregnancy should make pregnancy *prevention* their highest priority. The most effective strategy for achieving this goal is to make free or low-cost contraception available confidentially. In addition to supporting existing efforts to provide contraception to teenagers through clinics and private physicians, the National Research Council panel recommended the development, refinement, and evaluation of school-based clinics; the inclusion of information about contraception in sex education programs; and the advertising of contraceptives.

The report also recognized that teenagers need to understand why being a parent is inappropriate so early in their lives. It suggested that they be encouraged to establish career goals and to appreciate the value of educational attainment and employment skills. The National Research Council panel recommended the development and evaluation of life-planning courses, of programs to improve school performance, and of employment programs, as well as the emulation of appropriate role models, even though these strategies have not been conclusively shown to reduce teen pregnancy. The panel supported family life education and sex education, training for assertiveness and responsible decision making, and more responsible portrayals of personal and sexual relationships in the media. In addition, the panel endorsed the development and evaluation of programs intended to delay the onset of sexual activity – even though it admitted that there is currently no evidence that such programs are effective.

When adolescents *do* become pregnant, the goal of educators and social service personnel should be to provide alternatives to adolescent childbearing and parenting, the panel concluded. It noted that pregnant teenagers should be given full information about the possible risks, benefits, and consequences of maternity, abortion, and adoption, as well as appropriate referrals. The report also urged that adolescents be encouraged, but not required, to involve their parents in their decision about abortion, and it recommended that ways be found to strengthen adoption services.

In an effort to promote positive outcomes for adolescent parents and their children, the panel recommended a broad array of special education programs and services to assist them in completing their education; stronger age-appropriate employment programs; model childcare programs; continued support for the provision of health and nutrition services, including prenatal, labor, and delivery care for pregnant teens, and pediatric care for their children; contraceptive services to prevent repeat pregnancies; and case-management services to help adolescents obtain the support and services they need.

THE ROLE OF SCHOOLS

Although the National Research Council did not outline a specific role that schools can play in addressing the issue of teenage pregnancy, many of the approaches it suggested either can be – or are already being – carried out by schools. Only a few of the many possible approaches are mentioned here.

Readers should keep in mind that the postponement of pregnancy and childbearing are associated with young people's goals and aspirations in life and with their academic performance. Thus the importance of a school's overall academic program and its extracurricular activities cannot be overstated. The ability of the school and the family to build a teenager's sense of self and of the future will probably have a far greater impact on the likelihood of teen pregnancy than any special programs of short duration designed expressly around that goal. Nevertheless, no matter how highly motivated an individual may be, millions of teenagers – both high- and low-achievers – are sexually active and at risk of pregnancy. Without accurate information and access to health services, these young people are likely to become pregnant, with potentially devastating consequences for their futures.

Teenagers (especially girls) who see a future for themselves are less likely to become sexually involved at an early age.

EDUCATIONAL APPROACHES

The common perception is that, if a school wants to help reduce teen pregnancy, it should introduce sex education. Only half of the school districts that offer sex education cite the reduction of teen pregnancy or childbearing as a major goal, however, according to a 1982 survey by the Urban Institute/National Association of State Boards of Education of 180 school districts in cities with populations over 100,000.[37] Most programs were instituted to promote rational and informed decision making on sex-related topics or simply to increase students' knowledge of reproduction.

This survey found that three-fourths of the city school districts provided some instruction in sex education in high school or junior high school and two-thirds provided it in elementary school. This does not mean, of course, that every school in these districts provided sex education or that the instruction was comprehensive or constituted a formal course. Indeed, most districts integrated the material into other courses, such as health education, biology, physical education, or home economics.

At the junior or senior high levels, sex education was typically found to consist of six to 10 hours of teaching time, with few districts providing comprehensive programs of more than 40 hours. Almost all the programs covered physiology, sexually transmitted diseases, pregnancy, and parenthood. More than 80% also included such topics as sexual relationships, communication, and decision making, as well as intercourse and the probability of pregnancy. Between 72% and 79% of the districts surveyed covered subjects related to the prevention of pregnancy, such as contraception, sources of family-planning services, and the most likely time for pregnancy to occur.

The topics least likely to be covered were homosexuality, gynecological examinations, abortion, and masturbation. Table 4 shows the grade level at which the largest number of districts in the 1982 study introduced 24 specific topics. The progression seems to be from physiological facts to reproductive facts and issues and then to more complicated, value-laden questions.

Most surveys indicate that about three out of four teens receive some type of formal sex education. The 1984 National Longitudinal Survey of Work Experience of Youth found that 60% of women and 52% of men in their twenties had taken a sex education course by age 19. It also found that sex education often occurs *after* young people have become sexually active.[38] The 1982 National Survey of Family Growth showed that 68% of 15- to 19-year-old females had received formal instruction about pregnancy and contraception and that an additional 16% had had instruction about pregnancy only.[39] And a Johns Hopkins University study found that in 1979 76% of girls aged 15 to 17 and 76% of boys aged 17 to 18 had received some classroom instruction on human sexuality.[40] None of these studies, however, looked specifically at whether the instruction had been in the school.

One of the most widely acclaimed sex education programs in the country is the Family Life/Sex Education course at George Mason High School in Falls Church, Virginia. The program was introduced 15 years ago with the active participation of parents, clergy, and the medical profession. Today it consists of a semester-long elective course for eighth-graders, another for high school seniors, and a quarter-long elective for seventh- and ninth-graders. Instruction covers anatomy and physiology, the reproductive process, contraception, abortion, and homosexuality, but it also extends to birth defects, aging, dying, and death.

The central purpose of the program is to help students understand themselves and to build their decision-making skills. Extensive use is made of group discussions of such complex situations as whether a deformed or mentally defective child should be kept alive or allowed to die or the possible reactions of a teenage couple confronted with an unintended pregnancy. The school believes that such discussions give teens an opportunity to think through their feelings and values on sex-related matters before they become sexually involved and face some of these situations.[41]

TABLE 4.

Grade-Level Placement of 24 Topics in City Schools

Grades 5-6

Physical differences*
Changes of puberty*

Grades 7-8

Intercourse and pregnancy probability*
Most likely time in cycle for pregnancy
Pregnancy and childbirth*
Consequences of teen pregnancy*
Sexually transmitted diseases*
Sexual feelings and attraction*
Communication with parents
Communication with opposite sex*
Media messages about sex
Resistance to peer pressure for sex
Sexual decision making*
Personal values*
Masturbation

Grades 9-10

Family planning sources
Contraceptives
Gynecological examination
Responsibilities of parenthood*
Teen marriage*
Love relationships and commitment*
Abortion
Homosexuality
Rape and sexual abuse

---

*Topic offered by at least 80% of districts.

Source: Freya L. Sonenstein and Karen J. Pittman, "The Availability of Sex Education in Large City School Districts," *Family Planning Perspectives*, January/February 1984, p. 19.

The evidence on the effectiveness of sex education is not conclusive. Study after study has shown that sex education increases knowledge, but its effects on behavior are more difficult to gauge.

There is strong evidence that instruction has *no* impact – one way or the other – on the likelihood that young people will initiate sexual activity. Even programs that concentrate exclusively on deterring sexual activity – to the exclusion of providing much other information – have been unable to demonstrate success. The evidence that sex education leads to a reduction in teen pregnancies is not compelling, but there is also no evidence that sex education is connected with an increase in teen pregnancies. When instruction covers contraception, there does appear to be an impact on contraceptive use by teens who are sexually active.[42] These findings are hardly surprising, since sex education usually consists of only a few hours of instruction, while teenagers receive information and "messages" about sex virtually every day of their lives.

A number of other educational approaches have also evolved. One entails education for parents, on the theory that they can effectively pass on sexual infor-

There is strong evidence that instruction has *no* impact on the likelihood that young people will initiate sexual activity.

mation in the context of family values. There is some evidence that open communication between parents and children about sex is associated with lower levels of sexual activity (at least among young teens) and with more consistent use of contraceptives among sexually active teens. Thus many sex education programs for adolescents are accompanied by parallel programs for parents in order to enhance parent/child communication.

Probably the best-known program for parents is run by the Family Guidance Center in St. Joseph, Missouri.[43] Courses are offered for parents of daughters in their early teen years, for parents of older teenage daughters, for parents of younger teenage sons, and for parents of older teenage sons. The topics include reproductive anatomy and physiology, pregnancy, childbirth, birth control, teen pregnancy, and parenthood. The program seeks to create an atmosphere that is both instructive and fun, using such techniques as discussions of problems that appear in letters to "Dear Abby." Parent education programs have been shown to improve knowledge and communication skills, but their impact on young people's knowledge and behavior is not known and would be difficult to assess.[44]

Another educational approach that is gaining currency is the "life-planning" approach. The theory behind life-planning programs is that teenagers who are highly motivated to achieve certain goals in life will recognize that premature parenthood can disrupt those plans. Thus teens who are strongly goal-oriented are more likely to avoid pregnancy or childbearing.

A life-planning curriculum developed and tested by the Center for Population Options is being used by schools and youth agencies in several communities around the U.S. The program is intended to help young people understand the links between their sexual decisions, parenthood, and vocational choices. It seeks to help teens set goals, build their self-esteem, clarify their personal and family values, and learn about sexuality and the responsibilities of parenthood.[45] Unfortunately, evidence on the impact of this approach is not yet in.[46]

A similar kind of project, the Teen Outreach Program, operates in the public schools in St. Louis, Missouri, in collaboration with the Junior League.[47] It includes after-school sessions designed to build self-esteem and reduce the incidence of unintended pregnancies and of dropping out of school. Weekly discussions focus on such issues as self-esteem, career planning, and sexuality. Teens are also placed as volunteers in community agencies to help them see themselves as contributing members of the community. Teen Outreach is being replicated in 17 cities around the country, and preliminary evaluations suggest that it has been successful in lowering pregnancy rates and course failure.

Another approach that has been growing in popularity – not only for sex education but also for other problems facing teens – is teen theater. Young people with dramatic talent and special training in human sexuality put on short skits, which may be improvised or scripted, for their peers. For example, the New Image Teen Theatre in San Diego, California, has one skit called "Mythbusters," in which commonly held myths about sexuality are corrected; another skit is called "Charlie Brown," in which the popular cartoon character seeks information about sex; a third skit, "Clinic Fears," is a humorous depiction of teenagers' fears about obtaining birth control.[48] The assumption underlying teen theater is that teens tend to listen to their peers, and therefore teenagers with accurate information can have a significant impact on others. This hypothesis has yet to be proved, however.

A related approach entails peer education. For example, in some public schools in Ann Arbor, Michigan, students have offices in which they meet with fellow students, answer their questions, distribute literature approved by an advisory committee, and make referrals to community agencies. The students who staff these offices are trained by Planned Parenthood and receive academic credit for their training. Teachers in the schools refer students to the peer educators and back them up when necessary.[49] Although such peer education programs appear to have a large effect on those trained as counselors, their effectiveness in reaching other teens is not as clear.[50]

A key to all these approaches is the ability of the educators to win the confidence of students and to make it widely known that they are available for consul-

"It's time you learned the facts of life, son. Sit down and let the computer tell you about them."

tation. With appropriate training, good rapport with students, and the authority to provide the necessary information and services, members of the school staff can certainly perform these functions.

LINK TO CLINICAL SERVICES

Information alone, without access to such medical services as contraception and prenatal care, cannot prevent pregnancy among sexually active teens or help an already-pregnant adolescent. Thus there should be a link between schools and medical providers.

These days, the most widely discussed approach to the provision of medical services to students is the school-based clinic. More than 70 schools around the country now have health clinics that were started in order to meet the special health needs of adolescents, particularly low-income adolescents. Among the services most frequently provided at these clinics are athletic physicals, general health assessments, screening services, immunizations, first-aid care, family planning, prenatal care, drug and alcohol abuse programs, and nutrition and weight reduction programs. These clinics differ from traditional school health programs in that they prescribe and sometimes dispense medication.[51]

School-based health clinics are usually organized by an outside organization or group (such as a health department, hospital, or private nonprofit institution) that lays the groundwork for the clinic in the community and provides the expertise, staff, and insurance. The school typically contributes the space and makes it easy for students to attend. The staff members of these clinics are generally nurse-practitioners and social workers, backed up by a physician. The clinics are always developed with extensive community input, as well as with the cooperation of the school board and the school administration.

One of the hopes of those who sponsor and organize clinics is that these clinics will help reduce teen pregnancy by providing information about human sexuality, contraception, and pregnancy – and by either providing contraceptive services or referring students to agencies that do so. For a variety of reasons (particularly because they are so accessible to teens), school-based clinics appear to offer a promising approach to the reduction of teen pregnancy. However, the clinics have sometimes attracted strong opposition because of their provision of contraceptive services – this despite the fact that less than 30% of the clinics actually dispense contraception at the school.[52]

One of the oldest school health clinic programs in the country is located in St. Paul, Minnesota. Researchers in that city report that, between 1976-77 and 1984-85, the birthrate among students in schools with clinics declined from 59 births per 1,000 students to 37 births per 1,000. The use of family-planning services also increased in the St. Paul program. Seven percent of all female students sought birth control services in the 1976-77 school year; in 1983-84, 35% did so.

The most widely discussed approach to the provision of medical services to students is the school-based clinic.

Data from a new school health program in Kansas City, Missouri, suggest that the use of birth control has improved among high school students. Of students who said that they had used birth control, 31% of those surveyed in 1985 said that they used it all the time; the comparable figure for a 1983 survey was 24%. Thirty-seven percent of the 1985 respondents who were sexually active said that they had never used birth control; the corresponding figure in the 1983 survey was 50%. The proportion who said that they had ever been pregnant was about 10% in both years, but the proportion who reported that they had had a baby dropped slightly, from 8% in 1983 to 6% in 1985.[53]

A slightly different approach, known as school-*linked* rather than school-*based*, was pioneered by some Baltimore public schools in cooperation with Johns Hopkins University.[54] Family-planning clinics located adjacent to the schools sent a nurse and a social worker into the schools. There, these professionals made formal presentations about the services available from the clinics and about reproductive health. They were also available to the students for several hours each day for counseling. The same personnel then conducted after-school sessions at the clinics, during which further counseling, films, and family-planning services were available

"They taught you about the birds and bees in sex education, but did they warn you about the drones?"

to the students free of charge and in strict confidence.

The results were impressive. Students who participated in the program delayed their first intercourse longer than did members of a control group. Higher proportions of female students came to the clinic for contraception before their first intercourse or soon afterward, and, after 28 months, the pregnancy rate had declined by 30% in the program schools, while it had risen by almost 60% in other schools. The Baltimore program demonstrated that a key element in the prevention of teen pregnancy is the link between information and medical services.

PROGRAMS FOR PREGNANT TEENS AND YOUNG PARENTS

A number of schools and other agencies have instituted special programs to help pregnant teenagers and young parents cope with the demands of school and pregnancy. A study of 127 cities in 1979-80 found that 90 had at least one program for pregnant teenagers.[55] In 83 of the cities, these programs were sponsored by local departments of education; other programs were sponsored by health departments. Medical care for the pregnant teenagers in these programs was provided by hospitals, private physicians, clinics, and other organized community programs.

The education strands of the programs themselves most frequently provided counseling, special education, and nutrition, as well as family life and sex education; more than 80% of the programs offered these services. Only 65% provided vocational assistance; 53% offered contraception to prevent a repeat pregnancy; 35% provided day care for infants; 34% offered special programs for young fathers; and 20% operated maternity homes. In 76 of the 90 cities surveyed, special education was provided in alternative schools. Less frequently it was provided in special classes or through home instruction. The major need perceived by these cities was for child care for the infants of teen parents.

A 1981 Rand Corporation study of the response of the public schools to teenage pregnancy and parenthood found that most of the school districts studied had established separate facilities for this population in order to avoid alienating the community by appearing to "condone" student pregnancy.[56] According to a 1986 survey of more than 700 school officials, conducted by the Education Research Group, 22% of the school districts surveyed had an alternative school for this population.[57] Although these alternative school programs were able to offer a general education curriculum that also emphasized relevant topics such as parenting and child development, the Rand study found that they tended to maintain relatively low academic standards. They also generally sent students back to their regular schools soon after delivery – at the very time when students were struggling to cope with schoolwork and the demands of a newborn baby. Often, students dropped out of school once they lost the support provided by the special program – in many cases because of the lack of child care.

Other school districts in the Rand Corporation study sought to provide special assistance to pregnant teens and young parents while keeping them in their regular schools. Some of these programs offered coursework on parenting and child development for academic credit; others offered such instruction, but without credit. A number of districts also operated child-care centers. Programs of this kind avoided the difficult transition to and from an alternative school, and they were more likely to keep students in school after they had become parents. Moreover, programs that sought to keep students in their regularly assigned schools tended to be less expensive than those that made use of special schools. It may be that this approach is gaining currency. The 1986 Education Research Group survey found that 80% of the school officials who responded favored mainstreaming pregnant teens and young parents.

One of the best-known alternative school programs is the New Futures School in Albuquerque, New Mexico, which has served pregnant adolescents since 1970 and young parents since 1979. The school offers academic classes required for high school graduation, GED preparation classes, special education classes, classes in parenting and child development, and child care during school hours. Health services are available on site, and there is a job training and placement program. More than 90% of the teen parents in the New Futures School complete their secondary education.[58]

A different model of providing special facilities for pregnant teens and teen parents is the Family Learning Center in the public schools in Leslie, Michigan, which is now 12 years old. The center is housed in two mobile units adjacent to the school. It stresses high school graduation, vocational preparation, parenting skills, and family involvement. The center also provides child care up to age 6. In 1985, 91% of the seniors graduated, and 97% of the eighth- through 11th-graders remained in school.[59]

Schools would be well advised to develop and implement programs with broad community, parental, and student involvement.

The National Research Council specifically called on schools to develop a broad array of special education programs and services to help pregnant teens and young parents complete their education; to develop and evaluate model child-care programs focused on the special needs of teen parents; and to give priority to parenting education, particularly for teen parents from disadvantaged backgrounds. The research shows that programs for pregnant teenagers and young parents must continue long after the traditional six-week postpartum period if they are to help young mothers adjust to parenthood and stay in school.

Issues related to teen pregnancy are becoming increasingly important to the schools. More teenagers are sexually active and at risk of pregnancy today than 10 or 15 years ago. Although fewer teens are giving birth than in the past, since enactment of Title IX, schools have an obligation to help pregnant teens and young parents continue their education.

In this article I have tried to give a brief overview of the kinds of programs that schools either have adopted or could adopt. Such programs, however, should not be regarded as panaceas. Because it is so difficult to follow young people over a period of years to find out about their continuing education and repeat pregnancies, it is hard to show results in such programs. Nevertheless, programs to address teenage pregnancy, whether through preventive approaches or through efforts to assist already pregnant teens, *do* increase young people's knowledge of sex-related matters, and common sense suggests that these programs have some impact on behavior. The research definitely shows that concerns that such programs cause adolescents to experiment with sex or to become parents are unfounded.

In developing programs, it is becoming increasingly clear that educators must clarify their goals. An initiative that is not designed specifically to reduce the incidence of teen pregnancy can hardly be expected to achieve that goal. Research also points strongly to the need to link education and health services – contraception in the case of preventive programs and prenatal care for teens who are already pregnant.

Recognizing the sensitivity of these issues, school districts would be well advised to develop and implement programs with broad community, parental, and student involvement. When faced with the facts about teenage sexual behavior, pregnancy, and childbearing, the overwhelming majority of the public understands and supports the kinds of programs that are needed. And the full participation of members of the community can deflect the criticism from the small but vocal minorities who inevitably oppose programs that deal with teen pregnancy.

MUSIC DEPT.
SAX EDUCATION
DAVE CARPENTER

---

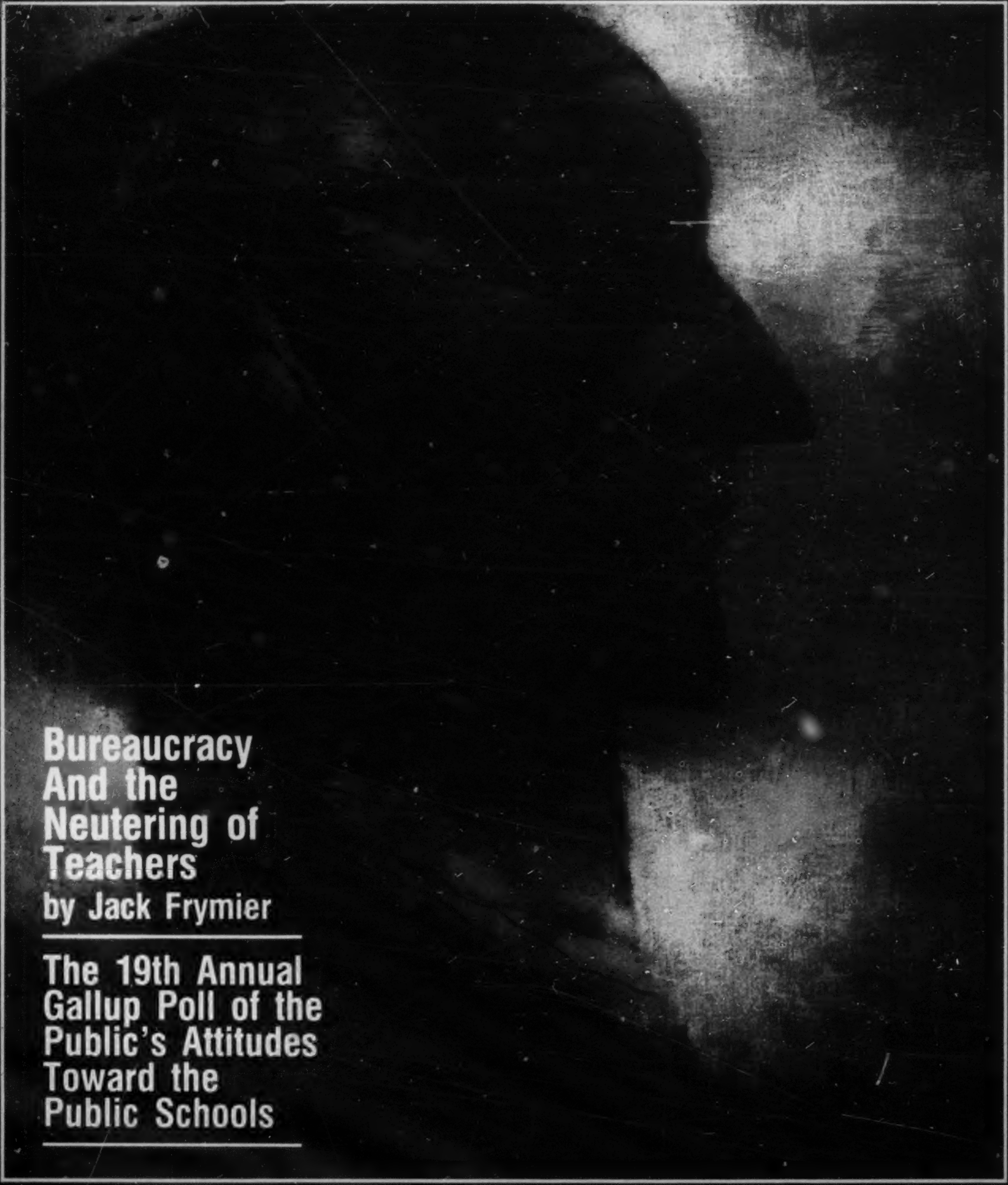
1. Education Research Group, *Teen Pregnancy: Impact on the Schools* (Alexandria, Va.: Capitol Publications, 1987).
2. National Research Council, *Risking the Future: Adolescent Sexuality, Pregnancy, and Childbearing* (Washington, D.C.: National Academy Press, 1987), Table 2-10.
3. Ibid., Tables 2-6 and 2-10.
4. Frank L. Mott and William Marsiglio, "Early Childbearing and Completion of High School," *Family Planning Perspectives*, September/October 1985, p. 234.
5. National Research Council, p. 125.
6. Alan Guttmacher Institute, *Teenage Pregnancy: The Problem That Hasn't Gone Away* (New York: AGI, 1981), p. 28.
7. National Research Council, pp. 128, 130.
8. Martha R. Burt, "Estimating the Public Costs of Teenage Childbearing," *Family Planning Perspectives*, September/October 1986, p. 221.
9. National Research Council, p. 65.
10. Ibid., p. 128.
11. U.S. Bureau of the Census, *Characteristics of the Population Below the Poverty Level: 1982* (Washington, D.C.: Current Population Reports, Series P-60, No. 144, 1984), Table 18.
12. National Research Council, p. 134.
13. Ibid., p. 138.
14. Elise F. Jones et al., "Teenage Pregnancy in Developed Countries: Determinants and Policy Implications," *Family Planning Perspectives*, March/April 1985, p. 53.
15. National Research Council, Tables 2-1, 2-11, and p. 51.
16. Ibid., Table 2-11.
17. Ibid., Table 2-6.
18. Ibid., Table 2-5.
19. Ibid., p. 51.
20. Ibid., Table 2-8.
21. Ibid., p. 46.
22. Ibid., p. 49.
23. Michael A. Koenig and Melvin Zelnik, "The Risk of Premarital First Pregnancy Among Metropolitan-Area Teenagers: 1976 and 1979," *Family Planning Perspectives*, September/October 1982, p. 239.
24. National Research Council, Table 2-11.
25. National Center for Health Statistics, "Advance Report of Final Natality Statistics, 1984," *Monthly Vital Statistics Report*, vol. 35, no. 4, supplement, 18 July 1986; and National Center for Health Statistics, "Summary Report, Final Natality Statistics, 1970," *Vital Statistics Report*, vol. 22, no. 12, supplement, 20 March 1974.
26. National Research Council, p. 65.
27. Ibid., p. 60.
28. Ibid., Table 2-15.
29. Ibid., Figure 2-1 and p. 65.
30. Ibid., p. 95.
31. Ibid.
32. Ibid., p. 120.
33. Children's Defense Fund, *Preventing Adolescent Pregnancy: What Schools Can Do* (Washington, D.C.: CDF, 1986).
34. Susheela Singh, "Adolescent Pregnancy in the United States: An Interstate Analysis," *Family Planning Perspectives*, September/October 1986, p. 210.
35. Jones et al., "Teenage Pregnancy in Developed Countries. . . ."
36. National Research Council, *Risking the Future. . . .*
37. Freya L. Sonenstein and Karen J. Pittman, "The Availability of Sex Education in Large City School Districts," *Family Planning Perspectives*, January/February 1984, p. 19.
38. William Marsiglio and Frank L. Mott, "The Impact of Sex Education on Sexual Activity, Contraceptive Use, and Premarital Pregnancy Among American Teenagers," *Family Planning Perspectives*, July/August 1986, p. 151.
39. Deborah Anne Dawson, "The Effects of Sex Education on Adolescent Behavior," *Family Planning Perspectives*, July/August 1986, p. 162.
40. Melvin Zelnik and Young J. Kim, "Sex Education and Its Association with Teenage Sexual Activity, Pregnancy, and Contraceptive Use," *Family Planning Perspectives*, May/June 1982, p. 117.
41. Personal communication with Mary Lee Tatum, 9 March 1987.
42. National Research Council, p. 143; and Dawson, p. 162.
43. Center for Population Options, *Programs at a Glance* (Washington, D.C.: CPO, 1986), p. 15.
44. National Research Council, p. 149; and Judith S. Alter et al., "Teaching Parents to Be the Primary Sexuality Educators of Their Children," *Impact of Programs, Vol. I* (Bethesda, Md.: Mathtech, Inc., February 1982), p. 60.
45. Center for Population Options, p. 56.
46. National Research Council, p. 175.
47. Children's Defense Fund, *Model Programs: Preventing Adolescent Pregnancy and Building Youth Self-Sufficiency* (Washington, D.C.: CDF, July 1986).
48. Center for Population Options, p. 55.
49. Personal communication with Kathleen Bauman, Planned Parenthood of Mid-Michigan, Ann Arbor, 5 March 1987.
50. National Research Council, p. 143.
51. Support Center for School-Based Clinics, *School-Based Clinics: Update 1986* (Washington, D.C.: Center for Population Options, 1986).
52. Ibid., p. 9.
53. Asta M. Kenney, "School-Based Clinics: A National Conference," *Family Planning Perspectives*, January/February 1986, p. 44.
54. Laurie S. Zabin et al., "Evaluation of a Pregnancy Prevention Program for Urban Teenagers," *Family Planning Perspectives*, May/June 1986, p. 119.
55. Helen W. Wallace et al., "Services for and Needs of Pregnant Teenagers in Large Cities of the United States, 1979-80," *Public Health Reports*, November/December 1982, p. 583.
56. Gail L. Zellman, *The Response of the Schools to Teenage Pregnancy and Parenthood: Executive Summary* (Santa Monica, Calif.: Rand Corporation, April 1981).
57. Education Research Group, p. 85.
58. Personal communication with Sharon Rodine, National Organization on Adolescent Pregnancy and Parenting, 27 February 1987.
59. Ibid.

A8680-1 A
9/10/87

PHI DELTA

KAPPAN

SEPTEMBER 1987



Bureaucracy And the Neutering of Teachers

by Jack Frymier

The 19th Annual Gallup Poll of the Public's Attitudes Toward the Public Schools

Phi Delta September 1987 • Volume 69 • Number 1

KAPPAN

FEATURES

9 **Bureaucracy and the Neutering of Teachers,** *by Jack Frymier*

15 **A Complaint and a Prediction,** *by Charles M. Breinin*

17 **The 19th Annual Gallup Poll of the Public's Attitudes Toward the Public Schools,** *by Alec M. Gallup and David L. Clark*

31 **Teacher Certification Tests: Do They Really Measure What We Need to Know?,** *by George F. Madaus and Diana Pullin*

38 **Assessment for Teaching: An Initiative for the Profession,** *by Lee S. Shulman*

45 **Recertification Tests for Teachers: A Defensible Safeguard for Society,** *by W. James Popham and W. N. Kirby*

49 **Who Is Accountable for 'Thoughtfulness'?,** *by Rexford Brown*

53 **Schools Boards: The Forgotten Players on the Education Team,** *by Jacqueline P. Danzberger, Lila N. Carol, Luvern L. Cunningham, Michael W. Kirst, Barbara A. McCloud, and Michael D. Usdan*

60 **State Boards in an Era of Reform,** *by Michael Cohen*

65 **Board/Staff Partnership: The Key to the Effectiveness of State and Local Boards,** *by Grady McGonagill*

69 **The TV Teacher Trivia Test,** *by Edward J. Nowicki*

71 **Fallowships: Fertilizing the Groves of Academe,** *by Albert A. Blum*

DEPARTMENTS

2 **THE EDITOR'S PAGE,** Waiting for Perfection

4 **WASHINGTON REPORT,** *by Anne C. Lewis*

6 **STATELINE,** *by Chris Pipho*

73 **RESEARCH,** *by Gerald W. Bracey*

77 **DE JURE,** Supreme Court Strikes Down Louisiana Creationism Act, *by Thomas J. Flygare*

79 **IN EUROPE,** High School Graduation, International Style, *by Michael G. Bruce*

81 **PROTOTYPES,** Preventive Preschool Programming That Works, *by Judith A. Harper*

83 **BOOKS,** *Laurence D. Brown*

84 **BACKTALK**

Cover Illustration: Brad Holland

The 19th Annual Gallup Poll Of the Public's Attitudes Toward the Public Schools

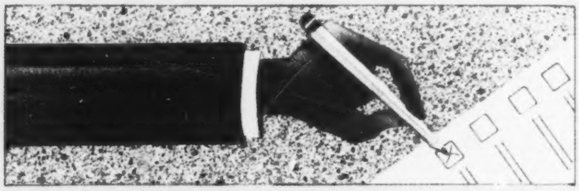
by Alec M. Gallup and David L. Clark

Illustration by Ned Shaw

The 1987 Phi Delta Kappa/Gallup Poll of the Public's Attitudes Toward the Public Schools focuses on educational policies pursued by the Reagan Administration over the past six years. The 19th poll also continues to track trends in opinion on other questions.

Since 1981 federal education policy has changed. For example, federal expenditures for educational programs have been constrained. The report of the National Commission on Excellence in Education, *A Nation at Risk*, called for higher school standards and increased competition among schools and students. Passage of the Education Consolidation and Improvement Act of 1981 reduced categorical program aid to schools and increased the influence of state education agencies by making block grants to states. U.S. Secretary of Education William Bennett chose as the hallmark for his tenure an emphasis on the "three C's": parental *choice, character* education, and the *content* of the curriculum.

As the Reagan Administration nears a close, this survey assesses what the public thinks about the matters the President chose to bring to the country's attention during his years in office.



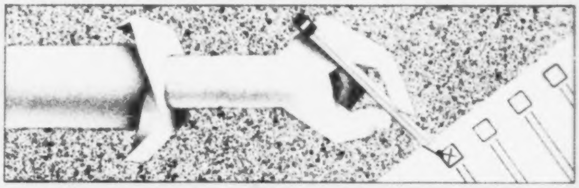
Perceived Improvement in Local Public Schools

In view of the emphasis on education reform since the publication of *A Nation at Risk*, respondents were asked whether, in the past five years, the public schools in their community had improved, gotten worse, or stayed the same. In general, the public reported sensing very little overall improvement. However, more public school parents (33%) feel that the public schools have improved than that they have grown worse (21%).

The question:

Would you say that the public schools in this community have improved from, say, five years ago, gotten worse, or stayed about the same?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Improved	25	21	33	26
Gotten worse	22	22	21	23
Stayed about the same	36	36	36	42
Don't know	17	21	10	9



Perceived Improvement in Student Achievement

A plurality of the public believes that, for students of all ability levels, achievement is about the same today as it was five years ago. Public school parents are less likely than nonpublic school parents or respondents with no children in school to believe that student achievement has gotten worse. More public school parents and nonpublic school parents believe that achievement has improved for students of above-average ability than for students of average ability or for students of below-average ability.

The first question:

Compared to five years ago, would you say that student achievement in the local public schools has improved, gotten worse, or stayed about the same for students with *above*-average ability?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Improved	27	23	34	29
Gotten worse	11	12	10	14
Stayed about the same	41	39	45	38
Don't know	21	26	11	19

The second question:

Compared to five years ago, would you say that student achievement in the local public schools has improved, gotten worse, or stayed about the same for students with *average* ability?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Improved	19	17	24	29
Gotten worse	14	15	12	15
Stayed about the same	45	42	53	40
Don't know	22	26	11	16

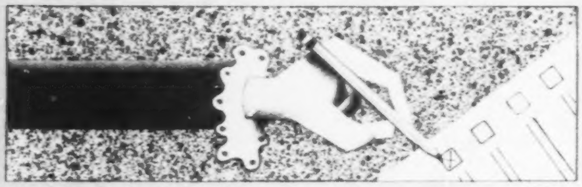
The third question:

Compared to five years ago, would you say that student achievement in the local public schools has improved, gotten worse, or stayed about the same for students with *below*-average ability?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Improved	20	17	28	23
Gotten worse	22	23	18	26

Illustrations by Ned Shaw

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Stayed about the same	35	32	39	36
Don't know	23	28	15	15



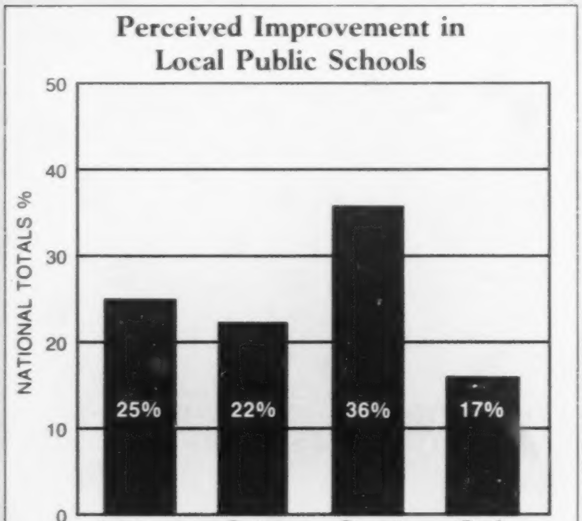
Raising Standards

By stunning margins, the public is confident that raising standards of academic achievement will improve the quality of education. The public feels — by a 7-1 margin — that telling school districts to require higher academic achievement of students will help school quality. Nonpublic school parents are almost unanimous in endorsing this strategy.

The question:

Some school districts have been told that they must require higher academic achievement of their students. Do you think this requirement would help or hurt the quality of the public schools in this community?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Help quality	76	74	79	89
Hurt quality	11	10	13	6
Don't know	13	16	8	5



Perceived Improvement in Local Public Schools

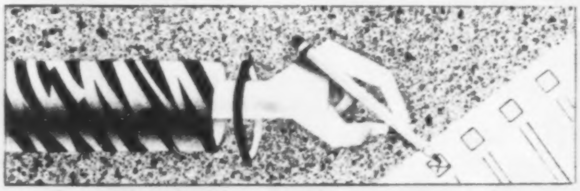
Effect on Students from Disadvantaged Backgrounds

One in three respondents (30%) expressed some concern about the effect of increased standards of achievement on students from low-income backgrounds. But a clear majority (52%) said that they think such a move will encourage these students to do better.

The question:

Some people say that raising achievement standards will encourage students from low-income backgrounds to do better in school. Others say that raising the standards will put these students at such a disadvantage that they will become discouraged about school or will even drop out. Do you think that raising achievement standards will encourage students from poor backgrounds to do better in school, or will it cause them to become discouraged or to drop out?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Yes, encourage	52	52	51	60
No, discourage	30	27	37	28
Don't know	18	21	12	12



Reporting Achievement For Comparison

In his 1984 State of the Union Address, President Reagan asserted, "Just as more incentives are needed within our schools, greater competition is needed among our schools. Without standards and competition there can be no champions, no records broken, no excellence — in education or any other walk of life." The public agrees. Seventy percent favor reporting the results of achievement tests by state and by school, so that comparisons can be made. The public feels that such comparisons would serve as incentives to local public schools, whether the results showed higher or lower scores for local students.

The first question:

It is now being proposed that educational achievement test results be reported on a state-by-state and school-by-school basis, so that comparisons can be made between schools of similar size and racial and economic make-up. Do you favor or oppose this proposal?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Favor	70	67	75	78
Oppose	14	13	17	17
Don't know	16	20	8	5

The second question:

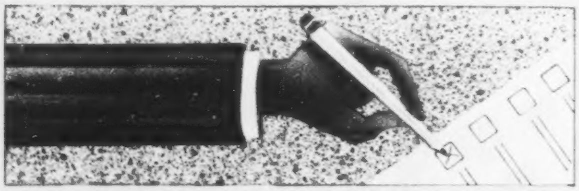
Let's assume that the students in the local public schools received *higher* test results than students in comparable schools elsewhere. Do you think this would serve as an incentive for the local schools to do an even better job or not?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Yes	72	69	77	76
No	12	12	15	13
Don't know	16	19	8	11

The third question:

Let's assume that the students in the public schools in this community received *lower* test scores than students in comparable schools elsewhere. Do you think this would encourage the local schools to try to do a better job or not?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Yes	72	69	79	75
No	12	12	12	14
Don't know	16	19	9	11



Support for Parental Choice

President Reagan and Secretary Bennett have pressed consistently for an expansion of parental choice. Respondents were asked about increasing parental choice with regard to the local schools their children attend. Seven of 10 Americans think that parents should have the right to choose. Asked, more specifically, if they would favor a voucher system to enable parents to choose among public, parochial, or private schools, respondents supported the idea by a narrow margin, as they have since 1981.

The lukewarm support for vouchers, in contrast to the public's broad support for choice, seems to stem from a concern that vouchers might hurt the public schools. The public is almost evenly divided on the question of whether a voucher system would hurt (42%) or help (36%) local public schools. Those who feel that a voucher system would hurt local schools are overwhelmingly opposed to vouchers (81% to 7%). Those who think it would help local schools favor vouchers (73% to 16%).

The question:

Do you think that parents in this community should or should not have the right to choose which local schools their children attend?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Yes	71	68	76	81
No	20	20	21	15
Don't know	9	12	3	4

Support for Vouchers

The first question:

In some nations, the government allots a certain amount of money for each child's education. The parents can then send the child to any public, parochial, or private school they choose. This is called the "voucher system." Would you like to see such an idea adopted in this country?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Yes	44	42	49	49
No	41	42	40	46
Don't know	15	16	11	5

NATIONAL TOTALS

	1987 %	1986 %	1985 %	1983 %	1981 %	1971 %	1970 %
Favor	44	46	45	51	43	38	43
Oppose	41	41	40	38	41	44	46
Don't know	15	13	15	11	16	18	11

The second question:

How about the public schools in this community? Do you think the voucher system would help or hurt the local schools?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Help local schools	36	35	38	37
Hurt local schools	42	41	44	49
Don't know	22	24	18	14

	National Totals %	Those in Favor Of Vouchers %	Those Opposed To Vouchers %
Help	36	73	7
Hurt	42	16	81
Don't know	22	11	12

Parental Input on Curriculum, Instructional Materials, and Library Books

No such equivocation exists regarding parental input in setting the curriculum or in the selection of instructional materials and library books. Overwhelmingly, the public feels that parents of public school students should have more (45%) rather than less (8%) to say about the courses that are offered. Thirty-seven percent of respondents feel that parents have about the right amount of say in determining the curriculum.

Despite concerns about censorship, the public also feels that parents should have more, rather than less, influence in the selection of instructional materials (38% to 14%) and in the selection of books placed in school libraries (36% to 16%). Thirty-nine percent feel that the public has about the right amount of say in the selection of instructional materials; 38% feel that the public has the right amount of say in the selection of books for school libraries.

The first question:

Do you feel that parents of public school students should have more say, less say, or do they have about the right amount of say regarding the curriculum, i.e., the courses offered?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
More say	45	40	51	65
Less say	8	10	5	4
Right amount	37	37	41	26
Don't know	10	13	3	5

The second question:

Do you feel that parents of public school students should have more say, less say, or do they have about the right amount of say regarding instructional materials?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
More say	38	36	42	50
Less say	14	15	10	12
Right amount	39	36	46	34
Don't know	9	13	2	4

The third question:

Do you feel that parents of public school students should have more say, less say, or do they have about the right amount of say regarding the books placed in school libraries?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
More say	36	34	40	47
Less say	16	17	11	14
Right amount	38	36	45	33
Don't know	10	13	4	6

Emphasis on the Basics

Few respondents doubt the efficacy of increasing the number of required courses in basic subjects (e.g., math and science), even at the expense of electives. Indeed, three-fourths of the public feel that doing so would improve the quality of the schools. Only 28% of the public feel that elementary schools give enough attention to the three R's. However, nearly half of the public school parents (46%) believe that enough time is given to those subjects in the elementary grades.

For students who plan to attend college, more than 70% of the respondents would require at least five basic subjects: mathematics, English, history, science, and computer training. More than half would require career education, business education, foreign language, and health education. The 1987 poll revealed an increased desire for required core courses for college-bound students since 1985, when this question was last included in the poll.

The respondents also tended to favor increasing the number of required courses for students who do not plan to go on to college. However, there was less agreement on which courses to require. More than 70% of the public would require mathematics, English, and vocational training. More than half would require history, business education, computer training, career education, and science.

At all grade levels, the public is concerned that every student have adequate exposure to and training in the basics. Moreover, the public does not have great difficulty defining what is basic: English and mathematics are basic for all students at all levels; history, science, and computer training are not far behind; vocational, career, or business education is a basic for the non-college-bound student.

The first question:

Some school districts have been told that they must require students to take more courses in basic subjects, such as math and science, thus reducing the number of elective courses students can take. Do you think this requirement would improve or hurt the quality of the public schools in this community?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Improve quality	75	74	76	85
Hurt quality	11	9	16	7
Don't know	14	17	8	8

The second question:

Is it your impression that the public elementary schools give enough attention, or not enough attention, to reading, writing, and arithmetic?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Enough	28	21	46	23
Not enough	58	62	47	67
Right amount*	6	6	5	6
Don't know	8	11	2	4

*Those who said "right amount" volunteered that answer.

Required Core Courses

The first question:

Please look over this card, which lists high school subjects. If you were the one to decide, what subjects would you require every high school student who *plans to go on to college* to take?

	For Those Planning to Go to College				
	1987 %	1985 %	1984 %	1983 %	1981 %
Mathematics	94	91	96	92	94
English	91	88	94	88	91
History/U.S. government	84	76	84	78	83
Science	83	76	84	76	76
Computer training	72	71	—	—	—
Career education	63	57	—	—	—
Business education	59	59	68	55	60
Foreign language	56	53	57	50	54
Health education	54	48	52	43	47
Physical education	45	40	43	41	44
Vocational training*	31	27	37	32	34
Music	23	24	22	18	26
Art	23	23	24	19	28

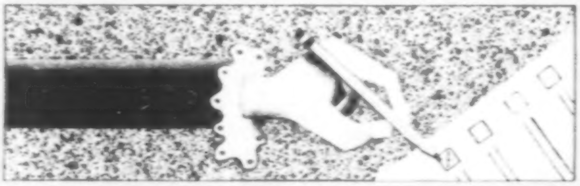
*In 1981 this subject was called "industrial arts/homemaking."

The second question:

What about those public high school students who do *not plan to go to college* when they graduate? Which courses would you require them to take?

"Now I'm just looking for anybody who doesn't stretch the truth."

	For Those *Not* Planning to Go to College				
	1987 %	1985 %	1984 %	1983 %	1981 %
Mathematics	88	85	92	87	91
English	85	81	90	83	89
Vocational training	78	75	83	74	64
History/U.S. government	69	61	71	63	71
Business education	65	60	76	65	75
Computer training	61	57	—	—	—
Career education	61	57	—	—	—
Science	57	51	61	53	58
Health education	49	43	50	42	46
Physical education	41	40	44	40	43
Foreign language	20	17	19	19	21



Government and the Schools

In the September 1984 *Kappan* President Reagan argued that "we must restore parents and state and local governments to their rightful place in the educational process. . . . Decisions about discipline, curriculum, and academic standards . . . shouldn't be made by people in Washington. They should be made at the local level by parents, teachers, and administrators in their own communities." The public agrees. There is no indication that the American people want to cut *any level* of government out of the educational arena.

However, when it comes to government influence in the schools, the people feel that the closer to home the source of that influence is, the better. Asked whether they favor more or less government influence in the improvement of schools, 37% of the respondents favored more federal influence in school improvement, 55% favored more state influence, and 62% favored more local influence. Only at the federal level did a plurality of respondents favor less influence (39% to 37%); at the local level, more than four times as many respondents favored more government influence than favored less (62% to 14%).

In one instance, the public does not favor vesting authority in local government. Asked who should check to determine whether local schools are conforming to the minimum standards set by the state, the public preferred the state by a 3-2 margin. The concern of the public for minimum standards supersedes its concern for local control.

One special issue surrounding the control of schools is what is termed disestablishment, i.e., dismantling the U.S. Department of Education (ED). ED was established near the end of the Carter Administration. Nearly one-fourth of those queried don't know whether they favor disestablishment. The remainder are divided almost equally on the question: 39% favor dismantling ED; 37% would keep ED intact.

The first question:

Would you like the federal government in Washington to have more influence, or less influence, on improving the local public schools? How about the state government? How about the local government?

	Federal Government		State Government		Local Government	
	National Totals %	Public School Parents %	National Totals %	Public School Parents %	National Totals %	Public School Parents %
More	37	41	55	59	62	67
Less	39	42	21	22	15	14
Same amount*	14	10	15	14	15	14
Don't know	10	7	9	5	[illegible]	5

---

*Those who said "same amount" volunteered that answer.

The second question:

In most cases, the state sets the minimum education standards in the local public schools. Who do you think should check to determine how well the local schools are conforming to these standards: the states or the local schools themselves?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
States	47	47	48	49
Local schools	29	28	30	32
Both*	15	13	18	14
Don't know	9	12	4	5

---

*Those who said "both" volunteered that answer.

The third question:

About 10 years ago a new federal Department of Education was established. The present Administration says that such a department is not needed and that its functions should be performed by a smaller agency or by other departments of the government. Do you agree or disagree with this view?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Agree	39	37	42	47
Disagree	37	36	40	37
Don't know	24	27	18	16

Tasks the Federal Government Should Undertake

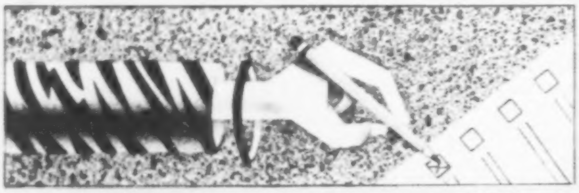
In a related question, respondents were asked whether or not the federal government should undertake each of 11 different tasks that pertain to public education. Some eight of 10 Americans favored federal involvement in requiring state and local systems to meet minimum standards (84%), advising and encouraging state and local systems to deal with national problems (83%), identifying important national problems (81%), promoting educational programs intended to solve social problems (80%), and funding programs to deal with important national educational problems (78%).

Some seven of 10 Americans would favor federal efforts to recognize the achievement of students, teachers, and schools (76%), to support a national testing program for public school students (74%), to collect and report education statistics (73%), to fund research and development (72%), and to provide financing for fellowships and scholarships for college students (72%).

The question:

This card lists various things that the federal government in Washington might do for education in America. As I read off each item, would you tell me whether it is something that you think that the government should do, or should not do, for American education?

	Yes %	No %	Don't Know %
Require states and local school districts to meet minimum educational standards	84	10	6
Advise and encourage state and local educational systems to deal with important national problems in education, such as illiteracy and poor math achievement	83	10	7
Identify important national problems in education, such as illiteracy and poor math achievement	81	12	7
Promote educational programs intended to help solve such social problems as poverty and unequal opportunities for minorities, women, and the handicapped	80	12	8
Fund programs to deal with important national educational problems, such as illiteracy and poor math achievement	78	15	7
Provide recognition and awards for high achievement by students, teachers, and schools	76	17	7
Support a national testing program for public school students	74	17	9
Collect and report information and statistics that measure the performance of education in the nation	73	18	9
Fund research and development in areas of need, such as the curriculum and teaching methods	72	19	9
Provide financing for scholarships and fellowships for college students	72	20	8
Provide financial aid to the states through block grants that can be used for education or for any other purpose	57	30	13



Character Education in the Schools

Secretary of Education William Bennett has made character education one of his primary emphases. The respondents were asked whether they thought courses on personal values and ethical behavior should be taught in the public schools or left to parents and the churches. Forty-three percent said that such courses should be taught in the schools, and another 13% volunteered that schools, parents, and churches should all be involved.

The question:

It has been proposed that the public schools include courses on "character education" to help students develop personal values and ethical be-

havior. Do you think that courses on values and ethical behavior should be taught in the public schools, or do you think that this should be left to the students' parents and the churches?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Yes, schools	43	42	45	54
No, parents and churches	36	36	38	31
Both*	13	13	13	11
Don't know	8	9	4	4

*Those who said "both" volunteered that answer.

Content of Character Education Courses

All respondents were also asked: 1) whether it would be possible to develop character education courses acceptable to most of the people in their communities, 2) who should have the most to say about the content of such courses, and 3) whether those students who objected to the content of character education courses should be excused from attendance.

Six of 10 Americans (62%) think that it would be possible to develop subject matter for coursework on ethics and values that would be acceptable to most of the residents of their communities. Only about two of 10 (23%) feel that this would not be possible.

By a substantial margin, Americans feel that parents should have the most influence on the content of character education courses. Forty-two percent mentioned parents. The school board, mentioned by 24%, was the next most frequently mentioned group. Relatively far behind are teachers (14%) and administrators (10%). The state and federal governments are at the bottom, named by only 9% and 5% respectively.

By a margin of almost 5-3, respondents favored excusing students from character education classes if their parents object to what is taught.

The first question:

Do you think that it would be possible or not possible to develop subject matter for a character education course that would be acceptable to most of the people in this community?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Possible	62	59	68	78
Not possible	23	24	22	17
Don't know	15	17	10	5

The second question:

If courses about values and ethical behavior were required in the local public schools, who do you think should have the most to say about the content of the courses? The federal government in Washington, the state government, the local school board, the school administrators, the teachers, or the parents?

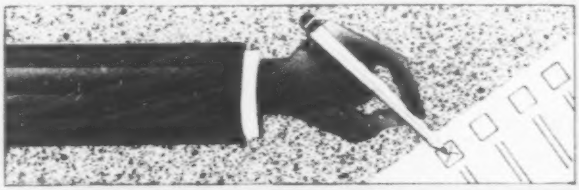
	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Parents	42	39	49	43
Local school board	24	24	24	30
Teachers	14	14	17	15
School administrators	10	11	8	7
State government	9	9	7	10
Federal government	5	5	5	6
Don't know	12	14	9	6

(Figures add to more than 100% because of multiple answers.)

The third question:

If students or their parents objected to what was taught in these classes, do you think the students should be excused from these classes or not?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Yes, excused	52	49	57	62
No, not excused	37	37	37	32
Don't know	11	14	6	6



School Prayer

President Reagan has always been unequivocal in his advocacy of school prayer. So has the general public. Seventy-eight percent of the public are aware of the fact that an amendment to the U.S. Constitution has been proposed allowing school prayer. Within that group, 68% favor the amendment, and 26% oppose it. Almost three-fourths of the total sample (71%) feel that only a small percentage of the population would be offended by school prayer.

The first question:

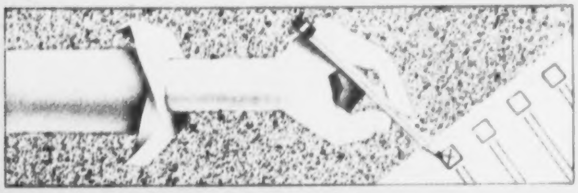
Do you favor or oppose an amendment to the U.S. Constitution that would allow prayer in the public schools?

Asked of those aware of the amendment	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Favor	68	68	69	59
Oppose	26	26	26	35
Don't know	6	6	5	6

The second question:

Do you think that a small percentage or a large percentage of the public would be offended if prayer were permitted in the public schools?

	National Totals %	Those Who Favor Prayer %	Those Who Oppose Prayer %
Large percentage	18	12	35
Small percentage	71	78	53
Don't know	11	10	12



Grading the Public Schools

If more people feel that the public schools have improved over the past five years than feel they have gotten worse, that should be reflected in the public's ratings of the local schools. And it is. The percentage of the public who give the schools grades of A or B is up 2% in 1987, and the percentage who give the schools a grade of C or higher is up 4%.

As has been the case in past polls, parents are more likely to give the schools in their communities grades of A or B than are nonparents (56% to 39%). Those Americans who are most likely to give the schools high grades are the best-educated (i.e., college graduates) and those in higher income categories (more than $30,000 a year). Those least likely to award the local public schools high marks tend to be younger (under age 30), less affluent, residents of central cities, and nonwhite.

One troublesome note in these data is the negative correlation between the level of satisfaction with the public schools and already-evident demographic shifts of the next 25 years. That is, the population groups most likely to grow in the coming decades are those that are also most likely to express dissatisfaction with the public schools. This problem is exacerbated by the public's feeling that the reform movement has improved the schools *least* for students of below-average ability. Barring a change in one of these factors, it is reasonable to predict that the grading of the public schools will decline sometime in the 1990s.

The first question:

> **Students are often given the grades A,B,C,D, and FAIL to denote the quality of their work. Suppose the *public* schools themselves, in this community, were graded in the same way. What grade would you give the public schools here — A,B,C,D, or FAIL?**

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
A + B	43	39	56	25
A	12	9	19	7
B	31	30	37	18
C	30	29	30	45
D	9	9	9	15
FAIL	4	4	3	8
Don't know	14	19	2	7

	A + B %	A %	B %	C %	D %	FAIL %	Don't Know %
NATIONAL TOTALS	**43**	**12**	**31**	**30**	**9**	**4**	**14**
Sex							
Men	42	12	30	34	9	3	12
Women	43	11	32	27	10	5	15
Race							
White	43	11	32	30	9	4	14
Nonwhite	35	14	21	34	11	6	12
Age							
18 - 29 years	36	8	28	34	12	4	14
30 - 49 years	44	13	31	33	10	5	8
50 and over	46	13	33	25	6	4	19
Community Size							
1 million and over	35	10	25	29	13	7	16
500,000 - 999,999	42	12	30	37	7	3	11
50,000 - 499,999	44	12	32	34	7	4	11
2,500 - 49,999	45	15	30	26	7	3	19
Under 2,500	53	13	40	28	7	2	10
Central city	28	7	21	39	14	6	13
Education							
College	46	11	35	30	10	3	11
Graduate	49	12	37	26	11	3	11
Incomplete	42	9	33	33	10	4	11
High school	40	11	29	32	9	5	14
Graduate	43	12	31	33	10	3	11
Incomplete	35	9	26	30	7	8	20
Grade school	40	19	21	22	6	6	26
Income							
$40,000 and over	48	13	35	29	10	4	9
$30,000 - $39,999	47	13	34	31	10	3	9
$20,000 - $29,999	45	12	33	31	7	5	12
$10,000 - $19,999	35	8	27	32	9	4	20
Under $10,000	45	16	29	24	10	3	18
Region							
East	39	11	28	29	11	6	15
Midwest	45	13	32	29	7	4	15
South	47	12	35	30	7	4	12
West	36	10	26	34	13	4	13

Respondents were also asked to grade separately the high schools and the elementary schools in their communities. High schools received markedly lower ratings than elementary schools. Forty percent of the public at large and 51% of respondents with children in the public schools awarded the high schools in their community a grade of A or B. The elementary schools received an A or B from 52% of the public at large and from a remarkable 70% of public school parents.

The second question:

> **How about the public *high schools* in this community? What grade would you give them?**

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
A + B	40	37	51	30
A	11	10	17	10
B	29	27	34	20
C	26	26	24	29
D	9	9	9	16
FAIL	4	4	3	10
Don't know	21	24	13	15

The third question:

How about the public *elementary schools* in this community? What grade would you give them?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
A + B	52	46	70	45
A	16	12	28	11
B	36	34	42	34
C	22	22	19	36
D	4	4	5	5
FAIL	3	2	1	6
Don't know	19	26	5	8

National Ratings

When the public is asked to grade the schools in the nation as a whole, the grades drop. Only about one-fourth (26%) of the public would give the schools nationally a grade of A or B; 70% would give them a grade of C or higher. As has been the case in previous polls, these ratings are sharply lower than the ratings of local public schools.

Once again, this year's survey found that the more familiar the grader is with a school, the higher the grade will tend to be. When parents are asked to grade the school their oldest child attends, 69% give that school an A or B. Only 30% of these same public school parents give an A or B to the schools nationwide. In the case of public schooling, familiarity breeds respect.

The first question:

How about the public schools in the nation as a whole? What grade would you give the public schools nationally — A,B,C,D, or FAIL?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
A + B	26	26	30	17
A	4	3	7	4
B	22	23	23	13
C	44	44	42	59
D	11	9	14	12
FAIL	2	2	2	3
Don't know	17	19	12	9

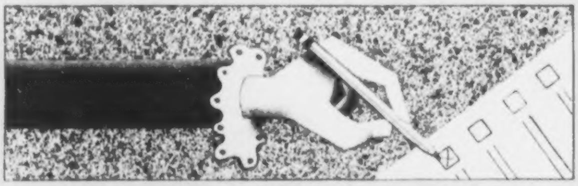
The second question:

What grade would you give the school your oldest child attends?

	Total Public School Parents %	High School %	Elementary School %
A + B	69	66	74
A	28	21	33
B	41	45	41
C	20	26	17
D	5	4	6
FAIL	2	4	1
Don't know	4	*	2

---

*Less than one-half of 1%.



Grading School Personnel

Teachers in local public schools receive high grades; 49% of the public give teachers a grade of A or B, as they have in previous polls. Public school parents rate teachers even higher; nearly two-thirds (64%) give them grades of A or B.

For the second year in a row, the ratings given administrators lagged behind those given teachers; 43% of the public award public school administrators a grade of A or B. However, public school parents rated principals and other administrators much higher than they were rated by respondents with no children in school or by nonpublic school parents. Six of 10 public school parents graded principals A or B, while only about four of 10 other respondents did so.

Not surprisingly, the public grades the personnel in elementary schools more favorably than the personnel in high schools, just as it grades the elementary schools higher than the secondary schools. When respondents were asked to grade local teachers, the grades were lower for high school teachers (43% gave them grades of A or B) than for elementary school teachers (53% gave them grades of A or B). Similarly, the grades given high school principals were lower (38% A or B) than those given elementary school principals (47% A or B).

The first question:

What grade would you give the teachers in the public schools in this community — A,B,C,D, or FAIL?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
A + B	49	44	64	44
A	15	12	24	12
B	34	32	40	32
C	25	25	25	31
D	6	5	7	9
FAIL	3	3	2	5
Don't know	17	23	2	11

The second question:

What grade would you give the principals and administrators in the public schools in this community?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
A + B	43	37	59	37
A	14	10	23	11
B	29	27	36	26
C	27	27	25	29
D	9	8	8	13
FAIL	3	3	4	8
Don't know	18	25	4	13

High School vs. Elementary School

The first question:

How about the local public *high school* teachers?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
A + B	43	40	51	39
A	12	10	17	11
B	31	30	34	28
C	24	24	24	26
D	8	8	8	14
FAIL	3	3	2	4
Don't know	22	25	15	17

The second question:

How about the local *elementary school* teachers?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
A + B	53	47	71	51
A	18	14	30	14
B	35	33	41	37
C	21	21	17	29
D	4	4	5	8
FAIL	2	2	1	3
Don't know	20	26	6	9

The third question:

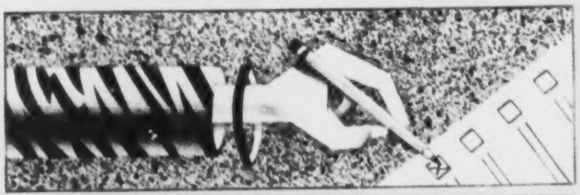
How about the local public *high school* principals and administrators?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
A + B	38	36	46	33
A	11	10	15	9
B	27	26	31	24
C	24	24	22	28
D	9	8	11	15
FAIL	5	5	4	8
Don't know	24	27	17	16

The fourth question:

How about the local *elementary school* principals and administrators?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
A + B	47	40	63	46
A	15	11	26	14
B	32	29	37	32
C	23	24	21	32
D	6	5	6	7
FAIL	2	2	2	4
Don't know	22	29	8	11



Liberal Arts Degrees for Teachers

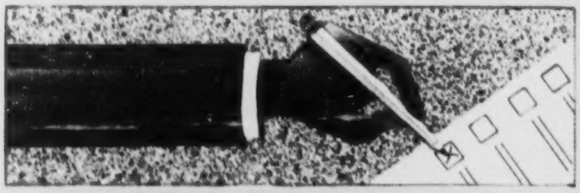
Despite the relatively high grades given to teachers by the American public, the 1987 survey still shows a demand for higher standards and requirements for teaching personnel. In the 1986 poll, 85% of the public favored requiring experienced teachers to pass a statewide test of basic competence in their subject areas. Three previous education polls showed across-the-board support for teacher competency testing.

This year the public was asked whether or not a prospective teacher should be required to have a four-year liberal arts degree with a *subject-matter major* before entering a teacher training program. This requirement, which has been advocated by two major reform groups in teacher education (the Carnegie Forum on Teaching and the Holmes Group), is favored by 72% of the public. Only 17% oppose it.

The question:

A recommendation has been made that anyone who wants to become a public school teacher must have a four-year liberal arts degree with a major in some subject before he or she can enter any teacher training program. Do you favor or oppose this recommendation?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Favor	72	70	76	75
Oppose	17	16	19	19
Don't know	11	14	5	6



Support for Sex Education

Although the results of the 1987 Gallup/Phi Delta Kappa survey show no statistically significant increase over the past two years in support for sex education, a substantial increase in the percentage of those favoring sex education has been recorded since the question was first asked in 1981. In that year, the inclusion of sex education in the public school curriculum was favored by a substantial majority

(70%) for high school students and by less than a majority (45%) for elementary students. Today, 76% of the public favor sex education for high school students, and 55% support sex education in elementary school.

The first question:

Do you feel that the public high schools should or should not include sex education in their instructional program?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Should	76	73	82	81
Should not	16	16	14	18
Don't know	8	11	4	1

The second question:

Do you feel that the public elementary schools should or should not include sex education in grades 4 through 8?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Should	55	52	60	69
Should not	37	38	35	29
Don't know	8	10	5	2

Topics to Be Covered in Sex Education

As for specific topics that should be covered in sex education, somewhat more liberal attitudes appear to prevail in 1987 than was the case in 1981. Approximately 4% more of the public find coverage of the seven topics selected for evaluation acceptable today than in 1981 — both for high school students and for elementary students.

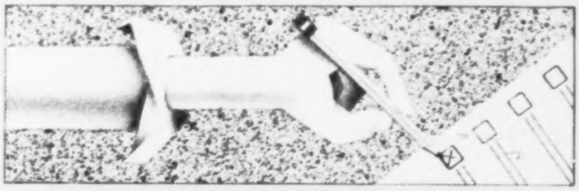
Large differences emerge between those topics that are acceptable in high school and those that are acceptable in elementary school. The two exceptions to this rule are the biology of reproduction and teenage pregnancy, which more than eight of 10 Americans feel should be covered in both the elementary schools and the high schools. Eight of 10 Americans think venereal disease, AIDS, and birth control should be covered in high school classes, but only about half would include these topics in the elementary school curriculum. A distinct minority would include the topics of homosexuality, premarital sex, abortion, and the nature of sexual intercourse at the elementary level — a figure that has not increased since 1981.

The question:

Which of the following topics, if any, listed on this card should be included in sex education in high school? In elementary school?

	Topics That Should Be Included In High School			In Elementary School		
	1987 %	1985 %	1981 %	1987 %	1985 %	1981 %
AIDS*	84	—	—	58	—	—
Birth control	83	85	79	49	48	45
Venereal disease	86	84	84	59	49	52
Biology of reproduction	80	82	77	82	89	83
Premarital sex	66	62	60	37	34	40
Nature of sexual intercourse	61	61	53	41	45	36
Abortion	60	60	54	28	28	26
Homosexuality	56	48	45	30	28	33
Teen pregnancy*	84	—	—	87	—	—

*These topics were not included in the earlier surveys.
(Figures add to more than 100% because of multiple answers.)



Most Important Problems Facing Local Public Schools in 1987

In 1986, for the first time, the public identified drug use (or abuse) as the most important problem facing the public schools. This year, drug use was again the number-one concern, and the percentage of the public mentioning it increased from 28% to 30%. Four other problems increased by 3% each in frequency from 1986 to 1987: lack of proper financial support, 11% to 14%; difficulty in getting good teachers, 6% to 9%; large schools/overcrowding, 5% to 8%; and pupils' lack of interest/truancy, 3% to 6%.

Lack of discipline was cited by 22% of the respondents and remained the number-two problem with which Americans feel the public schools must deal.

The question:

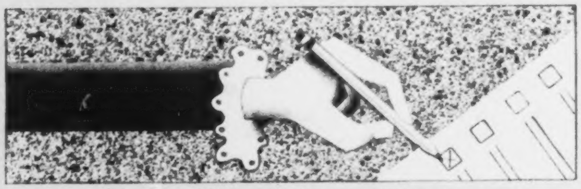
What do you think are the biggest problems with which the public schools in this community must deal?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Use of drugs	30	31	29	27
Lack of discipline	22	22	20	28
Lack of proper financial support	14	12	18	14
Difficulty in getting good teachers	9	9	10	9
Poor curriculum/poor standards	8	7	10	9
Large schools/ overcrowding	8	7	10	5
Moral standards	7	7	6	9
Parents' lack of interest	6	6	6	11
Pupils' lack of interest/truancy	6	7	5	4
Drinking/alcoholism	6	6	7	4
Teachers' lack of interest	5	4	7	12
Low teacher pay	5	4	5	9

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Lack of respect for teachers/other students	4	4	5	8
Integration/busing	4	4	4	3
Crime/vandalism	3	4	2	5
Problems with administration	2	2	3	7
Lack of needed teachers	2	2	3	1
Lack of proper facilities	2	2	1	3
Transportation	1	1	2	*
Fighting	1	1	1	*
Too much emphasis on sports	1	1	1	*
Communication problems	1	1	1	*
Peer pressure	1	1	1	1
Mismanagement of funds/programs	1	1	1	1
Parents' involvement in school activities	1	1	*	*
School board politics	1	1	1	*
Too many schools/ declining enrollment	1	1	1	1
There are no problems	2	2	4	1
Miscellaneous	7	6	11	6
Don't know	14	17	7	8

---

*Less than one-half of 1%.
(Figures add to more than 100% because of multiple answers.)



The Public's Knowledge of Local Schools

The public was asked to appraise its own knowledge of local schools, and the results are troubling. Only 15% of the American public feel well-informed about local schools. Among public school parents this percentage rises to only 25%. Most disturbing is the fact that a majority of those without children in school (55%) either asserted they are not well-informed or said that they "don't know." In contrast, fewer than one-fourth of the public school parents said they are *not* well-informed.

Responses were roughly the same when parents were asked about the information they had regarding the advantages and disadvantages of local schools and about the local school curriculum. In both instances, approximately one-fourth of public school parents admitted to little knowledge. If parents are to make informed choices about the schools that their children will attend (and both the public and Secretary Bennett endorse giving them that choice), then they will need to be better-informed about schools and curricula. Only 21% of the parents felt well-informed about the relative advantages of local schools; 26% rated themselves as well-informed on the curriculum.

The first question:

Would you say that you are well-informed, fairly well-informed, or not well-informed about the local public school situation?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Well-informed	15	12	25	16
Fairly well-informed	39	33	51	47
Not well-informed	41	48	23	34
Don't know	5	7	1	3

The second question:

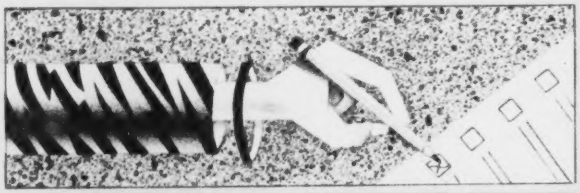
Would you say that you are well-informed, fairly well-informed, or not well-informed about the advantages and disadvantages of the various local public schools?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Well-informed	14	11	21	22
Fairly well-informed	36	30	51	41
Not well-informed	44	51	25	32
Don't know	6	8	3	5

The third question:

Would you say that you are well-informed, fairly well-informed, or not well-informed about what is being taught, what should be taught, or what should *not* be taught in the local public schools?

	National Totals %	No Children In School %	Public School Parents %	Nonpublic School Parents %
Well-informed	15	10	26	19
Fairly well-informed	36	32	48	41
Not well-informed	43	50	24	37
Don't know	6	8	2	3



The Public's Knowledge of Issues in Education

Few policy issues in education are likely to force their way onto the front pages of newspapers. When 13 education issues were presented to public school parents who were then asked if they had heard or read *something* about them, only six issues were checked by more than half of the respondents.

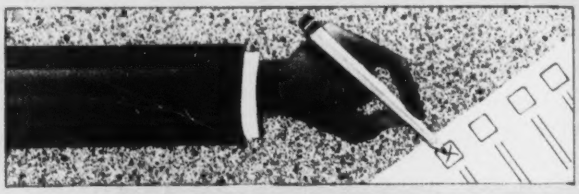
Some items considered critical by the makers of education policy are barely visible to the general public. For example, only one in five people had heard about the introduction of character education courses in the public schools; only about one in four knew of the national achievement awards programs for students and schools or about voucher plans; roughly four of 10 had heard about efforts to transfer authority from the federal government to the states, to increase the number of required courses in school, to teach about the role of religion in this country and the world, or to foster parental choice of the schools their children attend. On the other end of the scale, three-fourths of the public school parents had heard about sex education and about efforts to introduce organized prayer in the schools.

What the people have heard about and what they are concerned about are not always the same. People are concerned about sex education (27%) and prayer in the schools (25%). But they are also concerned about voucher plans (24%), the transfer of authority to the states (19%), and parental choice of children's schools (23%) — all issues about which the majority claims to have heard or read nothing.

The question:

> **This card lists various issues related to public education in this country that have been discussed in the news recently. Would you read off, by letter, all of those issues, if any, that you have heard or read something about?**
>
> **Which of these issues worry or concern you?**

	Public School Parents	
	Heard or Read About %	Worried or Concerned About %
Requiring sex education in the public schools	76	27
Permitting organized prayer in public schools	73	25
Requiring higher standards in the public schools	60	14
Recent efforts by the state government to improve public school education	59	15
Recent efforts by the federal government to improve public school education	53	14
Requiring higher achievement of public school students	52	14
Increasing the number of required courses in school and reducing the number of electives	40	14
Permitting parents more say about which local school their children attend	40	23
Teaching about the role played by religion in the history of this country and the world	38	17
Transferring the authority and responsibility for public education from the federal government to the state governments	36	19
Establishing national awards for high-performing public schools and for high-achieving public school students	28	11
Proposals to provide school vouchers to public school parents that could be used for any public, private, or church-related school	27	24
Introducing required courses in character education to develop personal values and ethical behavior	19	17



Research Procedure

The Sample. The sample used in this survey embraced a total of 1,571 adults (18 years of age and older). It is described as a modified probability sample of the U.S. population. Personal, in-home interviewing was conducted in all areas of the nation and in all types of communities. A description of the sample and sample design is available from Phi Delta Kappa.

Time of Interviewing. The fieldwork for this study was carried out during the period of 10-13 April 1987.

The Report. The heading "Nonpublic School Parents" consists of parents of students who attend parochial schools and parents of students who attend private or independent schools.

Due allowance must be made for statistical variation, especially in the case of findings for groups consisting of relatively few respondents, e.g., nonpublic school parents.

The findings of this report apply only to the U.S. as a whole and not to individual communities. Local surveys, using the same questions, can be conducted to determine how local areas compare with the national norm.

How to Order the Poll

As is always the case, local officials are welcome to use questions asked in this Gallup/PDK survey. The questions are not copyrighted. Moreover, no limits are placed on the use of information contained in this article, beyond customary credit to source.

The minimum order for reprints of the published version of the Gallup poll is 25 copies for $10. Additional copies are 25 cents each. This price includes postage for parcel post delivery. Where possible, enclose a check or money order.

If faster delivery is desired, do not include a remittance with your order. You will be billed at the above rates plus any additional cost involved in the method of delivery.

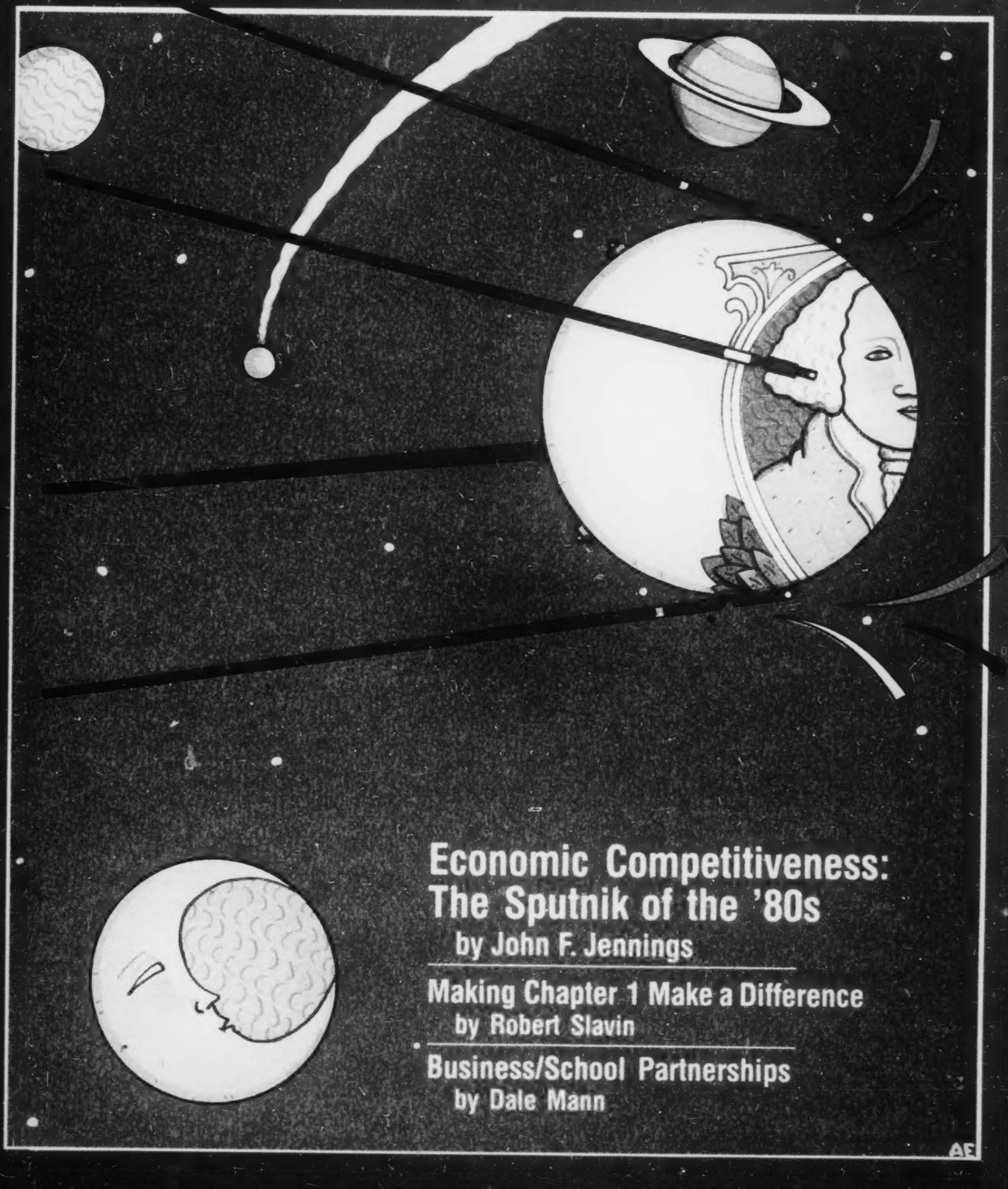
Phi Delta Kappa has published a 15-year (1969-1984) compilation of the Gallup polls on education. In this volume the poll questions are arranged topically rather than chronologically, making it easier to look up poll results on specific topics. Copies of *The Gallup Polls of Attitudes Toward Education, 1969-1984: A Topical Summary* can be ordered for $6 each ($5 for PDK members).

Orders for reprints or for the book should be addressed to Gallup Poll, Phi Delta Kappa, P.O. Box 789, Bloomington, IN 47402-0789. Ph. 812/339-1156.

A8680-1 A-
10/16/87

PHI DELTA

KAPPAN



Economic Competitiveness: The Sputnik of the '80s

by John F. Jennings

Making Chapter 1 Make a Difference

by Robert Slavin

Business/School Partnerships

by Dale Mann

THE EDITOR'S PAGE

The Enemy Within

I USED TO wonder why so many researchers don't seem to be able to write in plain English. And I despaired over the fact that so many educators of all kinds find it difficult to communicate in language that can be easily understood – or understood at all. I speculated that this ineptitude with the English language might explain why it's so hard to move valuable research findings into practice. After all, people can't put into practice what they can't comprehend.

Over time, I tried to explain to my own satisfaction why this communication problem exists. I came to realize that a good many scholarly journals demand that reports of research be presented in a time-honored style that guarantees that only other researchers will be able to understand what is being said. But most people in education are not researchers, and most people in education need to understand what they read pretty quickly.

For a time, I thought that the American Educational Research Association was going to do something about this problem. Great, I thought; here's the perfect organization to attack this matter. Surely the AERA numbers among its members some of the great obfuscators in the education community (not that the AERA has any monopoly on obfuscators). Let's attack this problem at its heart, I thought.

But the AERA let me down. It came up with the excellent idea of initiating an Editor-at-Large Project, the aim of which would be to translate and disseminate research findings to the larger community, even outside of education. But the idea was dumped before it got off the ground. Too difficult and time-consuming. Also too expensive, I'd wager.

Then I came to see that the problem is larger than I had first imagined. David Elkind pointed out (in the May 1986 *Kappan*) that "parents, educators, administrators, and legislators are blatantly ignoring the facts, the research, and the consensus of experts about how young children learn and how best to teach them." Of course, educators have a vested interest in ignoring research that repeatedly indicates that a lot of what goes on in classrooms is not best for children, but best for those who supervise them. Too often we teach for our own convenience, I'm afraid.

But another part of the reason is that a great many "professionals" in education simply do not read. It would be nice to think that they don't read because of my initial premise: that important research findings have been rendered incomprehensible. But the explanation may not be that simple. Maybe they're forced to take another job to keep up with the cost of living, and they can't find the time to read. Maybe they're just not interested in what someone else has to tell them about how they might become better teachers. Whatever the reason, a lot of educators don't read much of anything.

Next month the *Kappan* will publish a special section on literacy. These days everyone seems to agree that adult illiteracy is a major problem. But I'm not talking about illiteracy; I'm talking about *aliteracy*: the problem of people who can read just fine – but who do not choose to do so. David Harman of Teachers College, Columbia University, labels this "the largest literacy problem in the U.S. today . . . the diminution of the value of reading as an activity."

Professionals of any stripe make it a point to stay abreast of the literature in their field; a constantly updated knowledge base is one of the marks of a professional. Aliteracy is an enemy of professionalism. And at a time when educators are trying to persuade the public of their claim to the title of *professional*, it's a dangerous enemy indeed.

Cole

PHI DELTA USPS 429-840
KAPPAN

(ISSN 0031-7217) Published monthly, except July and August, by Phi Delta Kappa, Inc., Eighth & Union, P.O. Box 789, Bloomington, IN 47402. Subscription rate, $20 per year, domestic; $22.50 per year, foreign. Library and institution rate, $25 per year. Single copies $2.50 each; remit with order. Indexed in *Education Index, Current Index to Journals in Education, Research in Education*, and *Biography Index*; available on microfilm, University Microfilms, Inc., Ann Arbor, Mich. Member, Educational Press Association of America. Second-class postage paid at Bloomington, Ind., and at additional mailing offices. *Postmaster:* Send address changes to *Phi Delta Kappan*, P.O. Box 789, Bloomington, IN 47402.

Copyright 1987 by Phi Delta Kappa, Inc.

KAPPAN STAFF
ROBERT W. COLE, JR., Editor
PAULINE B. GOUGH, Managing Editor
KRISTIN HERZOG, Design/Production Director, Advertising/Circulation Manager
BRUCE M. SMITH, Associate Editor
STANLEY M. ELAM, Contributing Editor
MARY P. MILLER, Designer
TERRI HAMPTON, Permissions
SHEILA WAY and DEBBIE WEBB, Compositors

HEADQUARTERS STAFF
LOWELL C. ROSE, Executive Secretary; DON L. PARK, Associate Executive Secretary/Program; LARRY W. BARBER, Director, Center on Evaluation, Development, and Research (CEDR); DEREK L. BURLESON, Editor of Special Publications; ROBERT E. McDANIEL, Director of Administrative Services; NEVILLE L. ROBERTSON, Director, Center for Dissemination of Innovative Programs; JACK FRYMIER, Senior Fellow; WILMER K. BUGHER, Director of Special Projects; VLADIMIR BEKTESH, Media Specialist; SHARI BRADLEY, Marketing and Training Coordinator; WILLARD DUCKETT, Assistant Director, CEDR; DAVID M. RUETSCHLIN, Staff Associate, Special Publications; DEBORAH BURNETT STROTHER, CEDR Editor; SANDRA WEITH, Administrative Assistant, Program.

BOARD OF DIRECTORS
RON JOEKEL, President; Assoc. Dean, Teachers College, Univ. of Nebraska, Lincoln, NE 68508.
JOHN V. ROWLEY, President Elect; Principal, Heritage Jr. H.S., Livingston, NJ 07039.
JEROME G. KOPP, Past President; Principal, Downey H.S., Modesto, CA 95355.
ROGER W. ANDERSON, Vice President; Assoc. Dean and Registrar, Luther College, Decorah, IA 52101.
BEVERLY HADDOCK, Vice President; Music Coordinator, Bellingham Public Schools, Bellingham, WA 98225.
CAROL O'CONNELL, Vice President; Director, Elementary Educ., Northmont City Schools, Englewood, OH 45322.
BRUCE HONERT, Director, Dist. I; Assoc. Director, Alberta Education, Red Deer, Alberta T4N 6K8.
JACK KOSOY, Director, Dist II; Admin., Adult Educ., L.A. Unified School Dist., 16539 Bircher St., Granada Hills, CA 91344.
SHIRLEY N. ROBARDS, Director, Dist. III; Director of Student Teaching, Univ. of Tulsa, Tulsa, OK 74104.
QUINN BRUNSON, Director, Dist. IV; Professor of Educ., Univ. of North Dakota, Grand Forks, ND 58201.
LEODIES ARBURTHA, Director, Dist. V; Asst. Principal, Chicago Vocational H.S., 8732 S. Calumet Ave., Chicago, IL 60619.
JAMES V. FOGARTY, JR., Director, Dist. VI; Director, Special Educ., BOCES 2, Suffolk County, NY 11720.
JAMES M. SCHNEIDER, Director, Dist VII; Professor and Administrative Dean, Brevard Community College, Cocoa, FL 32922.
JAMES H. BASH, Director, Dist. VIII; Professor of Educ., Univ. of Virginia, Charlottesville.

EDITORIAL CONSULTANTS
JOMILLS H. BRADDOCK II, Principal Research Scientist, Center for Social Organization of Schools, Johns Hopkins University, Baltimore.
DAVID L. CLARK, Professor of Education, University of Virginia, Charlottesville.
ALONZO CRIM, Superintendent, Atlanta Public Schools.
MARTIN HABERMAN, Professor, University of Wisconsin, Milwaukee.
H. THOMAS JAMES, President Emeritus, Spencer Foundation, Chicago, Ill.
ANN LIEBERMAN, Professor, University of Washington, Seattle.
MILBREY McLAUGHLIN, Professor of Education, Stanford University, Stanford, Calif.
JOSEPH H. NATHAN, Coordinator, Spring Hill Regional Issues Forum, St. Paul, Minn.
ARTHUR G. POWELL, Director, Commission on Educational Issues, National Association of Independent Schools, Boston, Mass.
CAROLYN WARNER, Former Superintendent, Arizona Department of Education, Phoenix.
JEROME G. KOPP, Past President, PDK.

Reprints of articles appearing in the *Kappan* may be obtained from the business office: 1-2 pp., $8; 3-4 pp., $13; 5-6 pp., $19; and 7-8 pp., $25 for 100 copies. On larger orders, write for price schedule. Please remit with order.

The *Phi Delta Kappan* publishes articles concerned with educational research, service, and leadership; issues, trends, and policy are emphasized. Views expressed do not necessarily agree with positions taken by Phi Delta Kappa, the professional fraternity in education.

Address all purchase orders and address changes to Director of Administrative Services. Allow six weeks for processing address changes. Address all editorial correspondence to *Phi Delta Kappan*, P.O. Box 789, Bloomington, IN 47402. Ph. 812/339-1156. Please include postpaid, self-addressed envelope.

Phi Delta
October 1987 • Volume 69 • Number 2

KAPPAN

FEATURES

104 **The Sputnik of the Eighties,** *by John F. Jennings*

110 **Making Chapter 1 Make a Difference,** *by Robert E. Slavin*

120 **Unlocking School Reform: Uncertainty as a Condition of Professionalism,** *by Carl D. Glickman*

123 **Business Involvement and Public School Improvement, Part 1,** *by Dale Mann*

129 **What Doesn't Work: Explaining Policies of Retention in the Early Grades,** *by Mary Lee Smith and Lorrie A. Shepard*

135 **Watching a Changing Court: Will the Center Hold?,** *by David G. Savage*

138 **How Valid Are Principals' Judgments of Teacher Effectiveness?,** *by Donald M. Medley and Homer Coker*

141 **Teacher Evaluation: More Than a Game That Principals Play,** *by Aretha Butler Pigford*

143 **Evaluating Elementary Principals,** *by Phyllis L. White*

145 **A Short Perspective on Educational Administration,** *by Warren L. Royer*

147 **Teacher Collaboration: New Partnerships to Attack Old Problems,** *by Andrew C. Porter*

153 **The Paper Chase,** *by Susan Ohanian*

156 **Involving Low-Income Parents in the Schools: A Role for Policy?,** *by Milbrey Wallin McLaughlin and Patrick M. Shields*

DEPARTMENTS

98 **THE EDITOR'S PAGE,** The Enemy Within

100 **WASHINGTON REPORT,** *by Anne C. Lewis*

102 **STATELINE,** *by Chris Pipho*

161 **PEER,** An Interview with Michael Kirst, *by Deborah Burnett Strother*

165 **DE JURE,** The Full Employment for Attorneys Act, *by Perry A. Zirkel*

166 **PROTOTYPES,** Teaching History – Alive and Well, *by Hal Malehorn*

168 **BOOKS,** *Laurence D. Brown*

171 **BACKTALK**

Cover Illustration: Andrea Eberbach

Making Chapter 1 Make a Difference

Does Chapter 1 work well enough? Mr. Slavin examines the research on what works for students at risk of school failure and proposes a simple but powerful change.

BY ROBERT E. SLAVIN

THE SCHOOL Improvement Act of 1987 (H.R. 5), which reauthorizes Chapter 1, was passed by the House of Representatives and is under consideration by the Senate. It states that "Chapter 1 is the bedrock on which federal aid to elementary and secondary schools has been built." Politically, this bedrock is as sound as it has ever been in its 22-year history. The reauthorizing legislation passed the House with nearly unanimous approval.

In addition, there is a growing consensus that Chapter 1 works, that it increases the achievement of low-achieving, disadvantaged students. One indirect indication of the success of Chapter 1 is that the National Assessment of Educational Progress has found that the reading achievement of the lowest-performing minority students has increased significantly in recent years.[1]

But does Chapter 1 work well *enough*? The best-designed studies comparing students who received Chapter 1 services to similar students who did not receive these services show effects on the order of one to three percentile points at best. And even these small effects are largely limited to the primary grades.[2] The effects of existing Chapter 1 programs seem to be large enough to merit continued federal support and to demonstrate that we *can* make a difference with our lowest-achieving youngsters, and perhaps we should not expect miracles for the modest sum of about $500 per student. But a few more sight words or a little more speed doing arithmetic computations will hardly change the life chances of a disadvantaged 8-year-old who is depending on the schools to provide a path to prosperity.

Traditional Chapter 1 programs are simply not adequate for the job they are supposed to do.

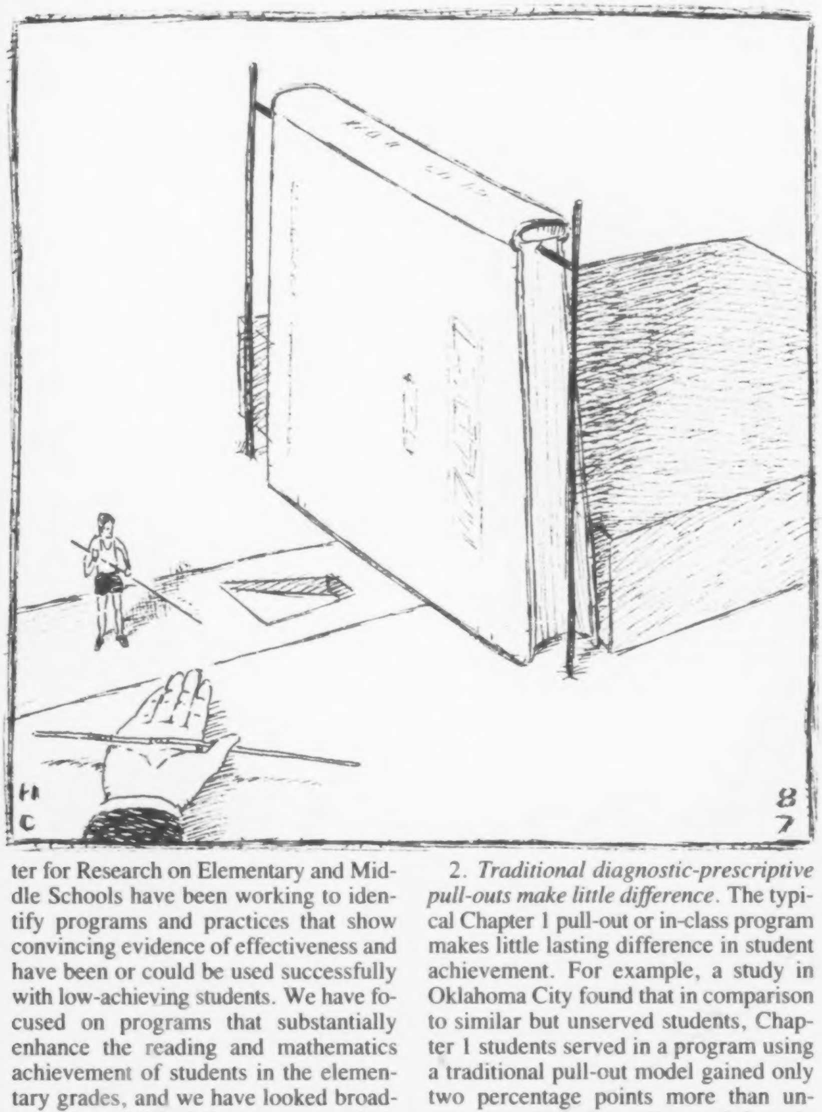
In a recent *Kappan* article, David Savage argued that the problem with Chapter 1 is that it is too spread out, that it fails to concentrate funds on the neediest schools.[3] The reauthorizing legislation passed by the House addresses this widely held concern to some degree and sets aside about 10% of the $3.9 billion annual Chapter 1 allocation for "concentration grants" to districts with high levels of poverty.

However, it is unlikely that merely doing more of the same will be enough. The problem with Chapter 1 is not the *amount* of funds it provides and not even how concentrated these funds are, but the *programs* that these funds buy. Traditional Chapter 1 programs are simply not adequate for the job they're supposed to do. Yet we know a great deal about effective instruction for students at risk of school failure, and there are programs already in existence that can make substantial differences in the achievement of these students.

WHAT WORKS?

What works for students at risk of school failure? To find out, a number of us at the Johns Hopkins University Cen-

ROBERT E. SLAVIN directs the Elementary School Program at the Center for Research on Elementary and Middle Schools, Johns Hopkins University, Baltimore. He would like to thank Mary Leighton, Gary Gottfredson, Nancy Madden, and Robert Stevens for their comments on an earlier draft of this article. The research on which this article is based was supported by a grant from the Office of Educational Research and Improvement, U.S. Department of Education (No. OERI-G-86-0006). However, the opinions expressed are the author's own.



It seems not to matter where Chapter 1 services are provided; what matters is the program itself.

ter for Research on Elementary and Middle Schools have been working to identify programs and practices that show convincing evidence of effectiveness and have been or could be used successfully with low-achieving students. We have focused on programs that substantially enhance the reading and mathematics achievement of students in the elementary grades, and we have looked broadly at the published literature, at technical reports, at government documents, and at other sources of information in a search for rigorously evaluated and effective models. Our main findings follow.

1. *Setting doesn't matter*. For more than a decade, researchers have criticized the use of Chapter 1 pull-out programs.[4] Consequently, an increasing number of schools (though still a minority) have begun to use in-class models, in which a Chapter 1 teacher or aide works in the classroom along with the regular teacher.[5] However, research that compares pull-out and in-class models has found few differences.[6] It seems not to matter *where* Chapter 1 services are provided; what matters is the program itself.

2. *Traditional diagnostic-prescriptive pull-outs make little difference*. The typical Chapter 1 pull-out or in-class program makes little lasting difference in student achievement. For example, a study in Oklahoma City found that in comparison to similar but unserved students, Chapter 1 students served in a program using a traditional pull-out model gained only two percentage points more than unserved students in reading and three in math.[7] Even smaller differences between Chapter 1 and similar unserved students were found in two studies in Baltimore.[8]

In our search for effective Chapter 1 programs, we wrote to every one of 116 Chapter 1 programs identified as "exemplary" by the U.S. Department of Education.[9] All the programs that sent us multi-year data showed significant gains in percentile ranks for fall-to-spring testing, but by the following fall these gains had disappeared in almost every case.[10]

3. *Effective programs differ markedly from traditional models*. With few exceptions, the programs we located that presented consistent and convincing evidence of instructional effectiveness looked completely different from traditional pull-out or in-class Chapter 1 models. In fact, the majority of the most effective and most cost-effective models could not be completely funded in most Chapter 1 schools, either under existing Chapter 1 legislation or under the new reauthorization.

In what follows, I discuss the programs that we found to have the greatest potential for accelerating the achievement of students at risk of school failure and the implications for policy of the research on these programs.

EFFECTIVE PROGRAMS

Comprehensive classroom programs. The programs that are least like traditional Chapter 1 models but have perhaps the greatest potential for accelerating the achievement of at-risk students are comprehensive modifications of the regular classroom instructional program that have been designed to enable the teacher to better meet a wide range of student needs. Tables 1 and 2 list examples of such programs that have been compared to traditional control groups and found to be effective.

Continuous-progress models. Continuous-progress programs make up the largest category of comprehensive classroom programs (Table 1). In continuous-progress programs, students proceed at their own pace through a sequence of well-defined objectives, but they are taught in small groups composed of students at similar skill levels. Students

Illustration by Harvey Chan

are constantly regrouped, often across grades, according to their performance on specific skills.

A great many continuous-progress programs have been found to be instructionally effective, from the highly structured DISTAR Program,[11] in which teachers follow instructional scripts, to U-SAIL and PEGASUS, which use similar flexible groupings and hierarchies of skills but adapt them to existing curriculum materials and teaching methods.

Cooperative learning programs. A second category of effective classroom models includes forms of cooperative learning that are designed to accommodate a wide range of levels of student performance (Table 2). In these methods, students work in small, mixed-ability learning teams and receive certificates and other recognition based on the performance of all team members. As in continuous-progress models, however, instruction is delivered to skill-based subgroups. In Team Accelerated Instruction in mathematics, students proceed at their own rates through a sequence of math skills,[12] while in Cooperative Integrated Reading and Composition, students work in their teams on activities relating to story structure, vocabulary, reading comprehension skills, spelling, and writing, as the teacher calls up homogeneous reading groups for instruction.[13]

TABLE 1.

Continuous-Progress Programs

Program and Source	Grades/ Subjects	Description
DISTAR (JDRP #77-122, JDRP #80-50)	K-6 Reading Math	Teacher instructed small groups using highly structured, scripted lessons. Students were frequently assessed and regrouped.
U-SAIL (JDRP #76-95)	1-9 Reading Math	Combined continuous progress and individualized activities. Adapted to existing curriculum and materials.
PEGASUS-PACE (JDRP #1, JDRP #79-1)	K-8 Reading	Students proceeded through 17 reading levels (K-8) and were frequently assessed and regrouped.
ECRI (JDRP #74-48)	1-6 Reading	Teacher instructs small groups; frequent mastery checks are made.
Project INSTRUCT (JDRP #75-37)	K-3 Reading	Students were grouped across grades according to reading skills; students proceed through skills at their own rate.
GEMS (JDRP #79-2)	K-12 Reading	Students worked in small groups or individually on materials at their own level. There was frequent assessment, mastery testing, and corrective instruction.
Early Childhood Preventative Curriculum (JDRP #74-57)	1 only Reading	Students identified as high risk were given intensive, continuous-progress, diagnostic-prescriptive program with small-group and individualized activities.

Source: Robert E. Slavin and Nancy A. Madden, "Effective Classroom Programs for Students at Risk," paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., 1987.

Tables 1 and 2 present information about continuous-progress programs and about cooperative learning programs, including their evaluations. Those with JDRP numbers are programs that have been approved by the U.S. Department of Education's Joint Dissemination Review Panel, which certifies that the evaluations have met certain minimum standards. The JDRP-approved programs are part of the National Diffusion Network (NDN) and are listed in the NDN's *Educational Programs That Work*.[14] The effect sizes are also listed in the tables. These represent the approximate difference in standard deviation units between classes that used the program in question and traditionally taught control classes. For example, an effect size of 1.0 would indicate that in one year students in a particular program gained one standard deviation more (typically, one to two grade-equivalents) than did students in traditionally taught classes.

PRINCIPAL
Gham

"Rely on psychology as much as possible to keep everyone happy, but feel free to use threats when you need to get something done."

The effect sizes for most of the classroom programs listed in Tables 1 and 2 are about .5, which means that students in these programs gained 50% to 100% more in grade-equivalents than did traditional classes. Yet the cost of implementing the most expensive of these programs – including materials, training, follow-up, teacher released time, and so on – is less than the cost of serving only *two* students in a pull-out model ($1,000 per class). These Chapter 1-eligible students are almost certainly better served by the classroom program than by the far more expensive pull-out model, in part because the classroom program encompasses all their reading and/or math instruction, not just a 30-minute segment. Moreover, the classroom programs are effective for *all* students, not just for the low-achievers.

Despite their effectiveness and cost-effectiveness, the programs listed in Tables 1 and 2 cannot be implemented entirely under Chapter 1 funding in most schools, because this would involve serving non-Chapter 1 students along with

Evaluation	Grades Evaluated		Effect Sizes	
Abt evaluation found positive effects in reading and math in most sites; JDRP-approved sites include Flint, Mich.; Dayton, O.; Flippin, Ark.; E. Las Vegas, N.M.; Uvalde, Tex.; Kingstree, S.C.; Cherokee, N.C.; and Washington, D.C.	Grades K-3 (4 yrs.)		Reading comp.	+.07
			Language	+.84
			Computation	+.57
			Problem solving	+.17
Both time-series and control-group comparisons showed clear effects in reading and math in suburban school near Salt Lake City. *Not disadvantaged.*	Grades 3-5 (2 yrs.)		Reading	+.45
			Math	+.27
Matched control-group design found convincing effects in reading in rural Princeton, Ill.; some students were Title I, but most were *not disadvantaged.*	Grade 2	+.72	Reading vocab.	+.53
	Grade 3	+.80	Reading comp.	+.61
	Grade 4	+.50		
	Grade 5	+.39		
	Grade 6	+.43		
Most evaluations were fall/spring or spring/spring. One control-group evaluation in suburban Chapter 1 school near Cincinnati found convincing effects.	Grade 4		Reading vocab.	+.51
			Reading comp.	+.39
Study compared students in Lincoln, Neb., schools that had successfully implemented program to matched schools. *Not disadvantaged.*	Grade 2		Word knowledge	+.30
			Reading	+.23
Study compared project schools with matched controls in suburb of Salt Lake City. *Not disadvantaged.*	Grade 1	+.11	Reading vocab.	+.39
	Grade 2	.00	Reading comp.	+.14
	Grade 3	+.41		
	Grade 4	+.23		
	Grade 5	+.44		
	Grade 6	+.39		
Study compared project schools to matched controls in Miami, Fla.	Grade 1		Paragraph meaning	+.95
			Wide Range Achievement (WRAT)	+.28

their Chapter 1 classmates. (The one exception is the small proportion of schools at least 75% of whose students are in poverty; under certain circumstances, such schools may implement schoolwide projects in which all students may benefit from Chapter 1 funds.) The restriction of Chapter 1 funds to only those students eligible to receive them creates an interesting paradox. Legislation intended to concentrate resources on low-achieving, disadvantaged students may inhibit the use of those classroom programs that have the greatest potential for meeting their needs, as well as for helping higher-achieving disadvantaged students reach their full potential.

INTENSIVE SUPPLEMENTARY PROGRAMS

Intensive supplementary models are a second major category of effective programs. These programs offer high-quality instruction for relatively short periods, usually in addition to regular classroom instruction. There are three major types of intensive supplementary programs: preventive tutoring models, remedial tutoring models, and computer-assisted instruction. Information on effective programs of these types is summarized in Tables 3, 4, and 5.

Preventive tutoring programs. Probably the most effective (but also the most expensive) of the various programs identified in our review were models in which specially trained adult tutors worked one-on-one with at-risk first-graders in an attempt to insure their success in initial reading (see Table 3). The idea behind these programs is to prevent the development of early reading problems, thereby making later remedial and special education unnecessary. Such programs typically produce substantial gains in reading by the end of first grade, and in a few studies these gains have been sustained at least through the end of second grade.[15]

Remedial tutoring programs. Programs that use adult volunteers or older students to tutor low-achievers are a second category of tutoring models. Because they rely on unpaid tutors, the costs of such programs are low, yet their effects can be substantial (see Table 4). In addition, tutoring programs that use older students as tutors tend to produce achievement gains for the tutors as well as for the tutees.[16]

Computer-assisted instruction. Several computer-assisted instruction (CAI) programs have been found to be instructionally effective (see Table 5). The most widely evaluated and consistently successful of these have been forms of

Neither federal nor state governments have any business mandating schools to use particular programs.

TABLE 2.
Cooperative Learning Programs

Program and Source	Grades/ Subjects	Description
Team Accelerated Instruction (JDRP #84-5)	3-6 Math	Students worked on programmed materials in mixed-ability teams while teachers taught same-ability teaching groups.
Cooperative Integrated Reading and Composition	3-5 Reading Writing	Students worked in mixed-ability teams while teachers taught reading groups.

Source: Robert E. Slavin and Nancy A. Madden, "Effective Classroom Programs for Students at Risk," paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., 1987.

the Computer Curriculum Corporation's drill-and-practice programs, on which students spend about 10 minutes per day in addition to their usual reading and math instruction.[17] Successful CAI models tend to be very expensive, and there is some question about whether the computer itself is a necessary ingredient. For example, the best evaluation of Basic Literacy Through Microcomputers (JDRP No. 84-14) used typewriters rather than computers to supplement the reading instruction of first-graders.

Unlike the continuous-progress and cooperative learning programs, tutoring or CAI programs may be funded under existing Chapter 1 rules, because these are pull-out programs that can be restricted to Chapter 1 students.

POLICY IMPLICATIONS

The programs discussed in the previous section certainly do not represent the total universe of instructional programs that have been found to be effective for elementary students, and the programs that appear in Tables 1 through 5 may in the future prove to be less effective than they now seem to be. However, let us assume for a moment that it is possible, now or in the future, to assemble a list of instructional programs that are widely acknowledged to be markedly more effective than traditional pull-out or in-class Chapter 1 models. The consequences could be revolutionary.

Chapter 1 legislation currently requires school districts applying for funds to guarantee their state education agencies that their programs "are of a sufficient size, scope, and quality to give reasonable promise of substantial progress toward meeting the educational needs of the children being served."[18] Even though research on existing Chapter 1 pull-out programs has found some achievement benefits for at-risk students, these are hardly large enough to be called "substantial progress." If we have available instructional programs that *do* give reasonable promise of substantial progress, then the political and legal calculus surrounding Chapter 1 programs is significantly altered.

Although legislation authorizing Title I and Chapter 1 has never mandated the use of pull-outs, school districts have overwhelmingly used pull-out models, largely because they provide the safest means of insuring that only students eligible for Chapter 1 are served by Chapter 1 funds.[19] If it can be shown that alternatives to traditional models are considerably more effective, then state education agencies may have the right, under the principle of "substantial progress," to demand that local districts stop submitting Chapter 1 proposals based on ineffective pull-out models or in-class models that amount to the same thing. Neither federal nor state governments have any business mandating particular programs. But they could demand that school districts choose from among coherent programs with proven track records for improving the achievement of students at risk of school failure.

In essence, if we know that we *can* make a substantial difference in the achievement of low-performing students, then we have a moral imperative to see that we *do* make that difference. But how can we bring about a state of affairs in which school districts are choosing from among proven programs, implementing these programs effectively, and producing measurable benefits for their at-risk

"Mr. Fristo told me today that the school's not big enough for both of us. Isn't that a funny thing to say about a huge place like Wilson Elementary?"

Evaluation	Grades Evaluated	Effect Sizes	
In three studies two with random assignment, one matched — TAI classes exceeded controls. One study was in rural Md., one in suburban Md., and one in urban Del.	Full sample (grades 3-6)	Computation	+.50
		Math concepts and applications	+.06
	Mainstreamed Students	Computation	+.38
		Math concepts and applications	+.47
CIRC classes exceeded matched control classes in suburban Baltimore study.	Full sample (grades 3-4)	Reading vocab.	+.12
		Reading comp.	+.35
		Oral reading	+.54
		Language	+.30
	Remedial Students	Reading vocab.	+.26
		Reading comp.	+.40
		Oral reading	+.71
		Language	+.37
	Mainstreamed Students	Reading vocab.	+.90
		Reading comp.	+.99
		Language	.00

students? Doing this on a national scale would require many changes in legislation, funding, and practice. These changes are outlined in the following sections.

1. *Establish a valid list of effective programs for at-risk students.* The first thing we need to do is to compile a set of existing instructional programs that show substantial evidence of instructional effectiveness. Distinguishing programs with rigorously evaluated, consistent effects from those with less-convincing evidence of success is essential. It will enable school districts to be reasonably sure that their investment in a particular program will pay off in gains in student achievement.

A mechanism that already exists for identification of effective programs is the Joint Dissemination Review Panel, which I mentioned above. The JDRP reviews programs developed under federal funding to see if they present adequate evidence of effectiveness. Programs that pass JDRP review are eligible for funding and dissemination through the National Diffusion Network.

The JDRP/NDN process is a conceptually sound one, but it has many flaws in practice. First, the panel has tended to look for programs with large effects and has paid less attention to experimental design. This has led to the acceptance by the JDRP of many projects that used as criteria for program effectiveness fall-to-spring percentile gains or normal-curve-equivalent gains, both of which greatly exaggerate program effectiveness. The majority of the more than 400 JDRP-approved programs used such designs.[20] Second, the evaluations presented to the JDRP may represent atypically effective sites rather than generally effective programs. Third, many programs approved by the JDRP were developed to meet local needs and do not lend themselves well to replication elsewhere.

What we need is a much shorter list of proven instructional programs that could be used effectively in Chapter 1 programs. Tables 1 through 5 represent a first step in this direction – but much more remains to be done.

2. *Provide resources to help districts adopt effective practices.* Once we have a list of effective models that could be used to meet the needs of students at risk, we will need a mechanism for implementing these programs successfully in Chapter 1 schools. There are many ways to arrange this.

For example, state or regional Chapter 1 Effectiveness Centers might be established, staffed by personnel trained in the various effective models and in the dissemination and implementation of successful practices. These centers could conduct intensive staff development programs with teams of teachers and administrators from various districts, as in California's highly successful Multi-District Teacher Training Institutes.[21] As an alternative to maintaining a fully staffed center, state-level agencies might be established to bring developers of effective programs into local districts, much as the NDN's state facilitators already do. At the local level, some proportion of Chapter 1 funds (or perhaps Chapter 2 funds) could be set aside to pay for training, follow-up, and evaluation of effective models.

3. *Fund research and development of new effective models.* Most of the effective programs listed in Tables 1 through 5 are quite old, having been developed in the 1960s and early 1970s when federal money for program development was available. However, since the Nixon Administration there has been little federal support for the kinds of comprehensive development and evaluation of instructional programs that have the greatest promise for making substantial differences in the achievement of at-risk students. It is important to provide school districts with a wide range of effective programs from which to choose and to make a substantial commitment to a serious, long-term effort to translate the knowledge about teaching and learning accumulated over the past 20 years into coherent, comprehensive instructional programs for students at risk. Billions have been spent on Chapter 1 activities,

Needed: a sizable, long-term commitment to the creation of effective programs for at-risk students.

TABLE 3.
Preventive Tutoring Programs

Program and Source	Grades/ Subjects	Description
Programmed Tutorial Reading (JDRP #74-17)	1 only Reading	Each student was tutored 15 minutes per day by paraprofessionals or older students.
Prevention of Learning Disabilities — New York (JDRP #79-33)	1-2 Reading	Each student was tutored three to five times per week for 30 minutes by a resource teacher.
Wallach Tutorial Program	1 only Reading	Students tutored by paraprofessionals for 30 minutes per day, 28 hours total.
Reading Recovery	1 only Reading	Students were tutored by specially trained teachers for 30 minutes per day, at least 60 days.

Source: Nancy A. Madden and Robert E. Slavin, "Effective Pull-Out Programs for Students at Risk," paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., 1987.

*Grade equivalents.

TABLE 4.
Remedial Tutoring Programs

Program and Source	Grades/ Subjects	Description
Training for Turnabout Volunteers (JDRP #81-11)	Tutors 7-9 Tutees 1-6 Reading Math	This was a cross-age tutoring program. Tutors were trained with preservice and inservice classes. The material was not programmed. Students were tutored 40 minutes a day, four days a week. The fifth day was used for inservice training.
School Volunteer Development Project (JDRP #75-79)	2-6 Reading Math	Community volunteers tutored students for two to four hours per week; each student was tutored for a minimum of one-half hour, four days a week.
Success Controlled Optimal Reading Experience (SCORE) (JDRP #80-42)	1-6 Reading Math	Each student was tutored for 15 minutes per day by older students or adult volunteers.

Source: Nancy A. Madden and Robert E. Slavin, "Effective Pull-Out Programs for Students at Risk," paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., 1987.

millions on Chapter 1 evaluation, but not one cent has been spent on development and evaluation of research-based programs specifically designed to use Chapter 1 resources to prevent or remediate learning problems.

What is needed is a sizable, long-term commitment to the creation of effective programs for at-risk students. Several groups of researchers and developers should be funded to follow a rational sequence of development, pilot-testing, small-scale evaluation, large-scale evaluation by developers, and large-scale evaluation by independent evaluators. Some projects already in existence might be ready to begin at some point in the middle of this sequence, while others might need to begin at the conceptualization stage. The idea, though, would be to put the very best minds in educational research and development (and related fields) to work in pursuit of a well-defined objective of enormous importance: the prevention and remediation of learning problems among students at risk of school failure.

In addition to a need for substantial and long-term funding, another essential element of such an effort is that the schools participating in research on effective programs for students at risk must be exempted from many Chapter 1 restrictions, particularly the requirement that Chapter 1 funds be spent only on students designated as eligible for the program. In fact, it might be a good idea to establish a set of criteria for research design (e.g., use of control groups, adequate measures) and allow any school district that is interested in evaluating innovative programs and is willing to meet these criteria to receive a waiver of certain Chapter 1 restrictions.

For example, Chapter 1 schools that do not meet the current 75% poverty requirement for implementation of schoolwide programs might be allowed to implement innovative schoolwide projects anyway if the research design allowed the schools to assess the achievement effects of the innovative schoolwide project for students eligible for Chapter 1. With certain safeguards, such a system could encourage state and local education agencies to set up well-designed experiments to test plausible programs that could supplement federal efforts. Furthermore,

Evaluation	Grades Evaluated	Effect Sizes		
Evaluation contained matched pairs of tutored/nontutored students in Farmington, Ut. There were no pretest differences. Effects were replicated using non-standardized tests in several other districts.	Grade 1 (bottom quartile)	Vocab.		+.65
		Comprehension		+.41
		Basal comprehension measure		+.50
			Gr. 1	Gr.2
Students were randomly assigned to tutoring or control treatments. Achievement was measured at end of first and second grades.	Grades 1 and 2 (students with low readiness scores)	WRAT	+.86	+1.06
		Word attack	+1.41	+1.67
		Word recog.	+.95	+.91
Unclear how students were assigned to treatments, but groups were equivalent at pretest. Compared tutoring to no tutoring.	Grade 1 (students below 40% on Metropolitan Achievement Tests [MAT])	Spache Word Recognition		+1.3*
		California Test of Basic Skills (CTBS) (total reading)		+.75
First study compared lowest readers in 14 Columbus, O., classes to similar students in comparison classes. Second study randomly assigned low readers to experimental and control groups.	Grade 1 (low readers)	CTBS (reading vocab.)		+.70
		CTBS (reading comp.)		+.92

Evaluation	Grades Evaluated	Effect Sizes	
One-year study in Miami, Fla., compared trained vs. untrained tutors in nonequivalent but unbiased groups. Five schools took part in the study.	Tutees 1-6	Tutees:	
		MAT (math)	+.93
		MAT (reading)	+.51
	Tutors 7-9	Tutors:	
		MAT (math)	+.49
		MAT (reading)	+.08
Students in Miami, Fla., were randomly assigned to tutored or nontutored conditions for one school year.	Grades 2-6	MAT (reading)	+.50
		MAT (math)	+1.1
Students in San Francisco were randomly assigned to tutored or control conditions — two controls were replicated over three years. No tests of reading comprehension were conducted; effects are for word recognition only.	Grades 1-6	WRAT	+.5-.7
		Gilmore	+.5

such a change would allow school districts to use Chapter 1 funds for classroom programs that benefit all students only if they could show that students within these classes who are eligible for Chapter 1 are making substantial progress.

4. *Establish independent evaluation centers*. Evaluations of programs by external, independent evaluators would be essential to insure the credibility of program effects. If we are to invest heavily in a small number of programs, we must be able to place a great deal of faith in their evaluations. The federal government should fund one or more independent evaluation centers, whose job would be overseeing and assisting in independent program evaluations conducted by state and local education agencies, as well as conducting evaluations of their own. In these evaluations, the outcome measures used would not be made available to the developers in advance (although

> A penny on the dollar would mean $39 million allocated solely to research and development.

TABLE 5.
Computer-Assisted Instruction Programs

Program and Source	Grades/ Subjects	Description
Computer Curriculum Corp. Study 1, LAUSD Study	1-6 Math 3-6 Reading, Language	Students engaged in drill-and-practice activities on computers for 10 minutes per day in addition to regular instruction.
Computer Curriculum Corp. Study 2, Lafayette Parish Title I Math (JDRP #82-46)	3-6 Math (Chapter 1)	Students engaged in drill-and-practice activities on computers for 10 minutes per day in addition to regular instruction.
Computer Curriculum Corp. Study 3, Merrimack Education Center (JDRP #82-34)	2-9 Reading (Chapter 1)	Students engaged in drill-and-practice activities on computers for 10 minutes per day in addition to regular instruction.
Basic Literacy Through Microcomputers (JDRP #84-14)	1-3 Reading (Chapter 1)	Microcomputers or typewriters were used to practice phonics and writing skills in addition to regular instruction.

Source: Nancy A. Madden and Robert E. Slavin, "Effective Pull-Out Programs for Students at Risk," paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., 1987.

developers would be told what domains the evaluations would assess). Teachers or schools might be randomly assigned to project or control conditions across a variety of sites.

These independent evaluations are a critical final step in the sequence of development and evaluation described above. Among other things, the knowledge that their products would ultimately be subjected to independent evaluation on valid measures of achievement that are not specifically keyed to the developer's own approach would force developers to conduct high-quality evaluations themselves and to avoid designing instructional strategies that essentially "teach to the test."

Developers would submit their programs to the independent evaluation centers to be considered for evaluation in a given year. The centers (or other review panels) would decide which programs to evaluate first by considering both the evaluation data submitted by the developer and the plausibility of and need for the program.

Obviously, it would be several years before newly developed programs could be ready for independent evaluation. However, the independent evaluation centers could begin by evaluating the most promising of the existing programs, such as those listed in Tables 1 through 5.

A PENNY PROPOSAL

Imagine that we had a set of programs that we knew to be instructionally effective (if properly implemented) for students at risk of school failure. Imagine that we knew what was required to implement and maintain these programs and that adequate resources were available to provide the training, support, and follow-up needed to implement them. If such a happy state of affairs existed, the situation with respect to the education of students who are at risk of school failure would be altered dramatically. We would no longer have excuses for failing to provide the most effective interventions for the neediest students; to do so would be as unacceptable as withholding effective medical treatment from children with curable diseases.

To bring this situation about, all that is needed is a long-term commitment of funds to get the best minds working on the problem. It is shameful that in the $3.9 billion Chapter 1 program there is *nothing* allocated to insuring that the programs bought at such cost actually pay off in significant improvement of student achievement.

A penny on the dollar would do it. A penny on the dollar would mean $39 million allocated solely to research and development of effective Chapter 1 programs. This is such a small portion of total appropriations for Chapter 1 that it could be raised without reducing services to children. For example, by holding Chapter 1 schools to spring achievement testing only (rather than fall *and* spring), we could save more than enough money.

Can we afford to spend 1% of Chapter 1 funds to make the other 99% pay off? A better question is, Can we afford *not* to do so? No one who looks dispassionately at the results of well-designed evaluations of existing Chapter 1 programs can possibly conclude that we are using Chapter 1 resources to maximum advantage. We know that disadvantaged and low-achieving students can learn. When they fail, it is the system that has failed them. For $500 per student, Chapter 1 in itself may not be able to "break the cycle of poverty," but for $5 per student we can certainly break the cycle of poor programs for students at risk. It is imperative that we do so.

---

1. John B. Carroll, "The National Assessments in Reading: Are We Misreading the Findings?," *Phi Delta Kappan*, February 1987, pp. 424-28.

2. Launor F. Carter, "The Sustaining Effects Study of Compensatory and Elementary Education," *Educational Researcher*, vol. 13, 1984, pp. 4-13; and Mary M. Kennedy, Beatrice F. Birman, and

Evaluation	Grades Evaluated	Effect Sizes			
Comparison was conducted between experimental groups and randomly selected controls. Groups were studied longitudinally over four years in four schools in the Los Angeles Unified School District.	Grades 1-6 math Grades 3-6 reading Grades 3-6 language	CTBS	Year 1	Year 2	Year 3
		Math			
		Computation	+.36	+.56	+.72
		Concepts	−.02	+.12	+.09
		Applications	+.03	+.12	+.26
		Reading			
		Vocabulary	+.25	+.17	+.58
		Comp.	+.23	−.01	−.24
		Spelling	+.14	+.05	+.14
		Language			
		Mechanics	+.22	+.27	+.25
		Expression	+.11	+.05	+.23
Students were compared to students receiving Chapter 1 pull-out services. Students were randomly assigned in Lafayette Parish, La.	Grades 3-6	CTBS (total math)			+.19
Students were randomly assigned in Merrimack, Mass., and were compared to students receiving Chapter 1 pull-out services.	Grades 2-9	MAT (reading)			+.40
Students were randomly assigned and were compared to students receiving no additional time.	Grade 1	California Achievement Test (reading)			+.58

Randy Demaline, *The Effectiveness of Chapter 1 Services* (Washington, D.C.: Office of Educational Research and Improvement, U.S. Department of Education, 1986).

3. David G. Savage, "Why Chapter 1 Hasn't Made Much Difference," *Phi Delta Kappan*, April 1987, pp. 581-84.

4. Gene V Glass and Mary Lee Smith, *Pull Out in Compensatory Education* (Washington, D.C.: Department of Health, Education, and Welfare, 1977).

5. Advanced Technology, *Local Operation of Title I, ESEA, 1976-1982: A Resource Book* (McLean, Va.: Advanced Technology, 1983).

6. Francis X. Archambault, "Pullout Versus In-Class Instruction in Compensatory Education," paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., 1987.

7. George H. Kimball, John Crawford, and Frank Raia, *Evaluation of the 1984-85 Oklahoma City Public Schools Chapter 1 Program* (Oklahoma City: Oklahoma City Public Schools, 1985).

8. Leonard Granick et al., *Optimizing Chapter 1 Program Effectiveness* (Baltimore: Baltimore City Public Schools, 1984); and Alice G. Pinderhughes et al., *Chapter 1 Services Report FY '86* (Baltimore: Baltimore City Public Schools, 1986).

9. Philip A. Griswold, Kathleen J. Cotton, and Joe B. Hansen, *Effective Compensatory Education Sourcebook* (Washington, D.C.: U.S. Government Printing Office, 1986).

10. For a discussion of methodological problems in the use of fall-to-spring gains, see Roy M. Gabriel et al., *Studying the Sustained Achievement of Chapter 1 Students* (Washington, D.C.: U.S. Department of Education, 1985).

11. Wesley C. Becker and Douglas Carnine, "Direct Instruction: An Effective Approach for Educational Intervention with the Disadvantaged and Low Performers," in Benjamin J. Lahey and Alan E. Kazdin, eds., *Advances in Child Clinical Psychology* (New York: Plenum, 1980), pp. 429-73.

12. Robert E. Slavin, "Team-Assisted Individualization: Combining Cooperative Learning and Individualized Instruction in Mathematics," in Robert E. Slavin et al., eds., *Learning to Cooperate, Cooperating to Learn* (New York: Plenum, 1985), pp. 177-209.

13. Robert J. Stevens, Nancy A. Madden, Robert E. Slavin, and Anna Marie Farnish, "Cooperative Integrated Reading and Composition: Two Field Experiments," *Reading Research Quarterly*, vol. 22, 1987, in press.

14. National Diffusion Network, *Educational Programs That Work*, 13th ed. (Longmont, Colo.: Sopris West, 1987).

15. Gay Su Pinnell, "Reading Recovery: A Pilot Study and Follow-Up of the Effects of an Early Intervention Program in Reading," paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., 1987.

16. Linda Devin-Sheehan, Robert Feldman, and Vernon Allen, "Research on Children Tutoring Children: A Critical Review," *Review of Educational Research*, vol. 46, 1976, pp. 355-85.

17. Marjorie Ragosta, "Computer-Assisted Instruction and Compensatory Education: A Longitudinal Analysis," *Machine-Mediated Learning*, vol. 1, 1983, pp. 97-127.

18. School Improvement Act, 1987, U.S. House of Representatives, Chapter 1 Reauthorization (H.R. 5, Sec. 1012.b.1).

19. Richard Allington and Peter Johnston, "Coordination, Collaboration, and Consistency: The Redesign of Compensatory and Special Education Interventions," paper presented at the Conference on Effects of Alternative Designs in Compensatory Education, Washington, D.C., June 1986.

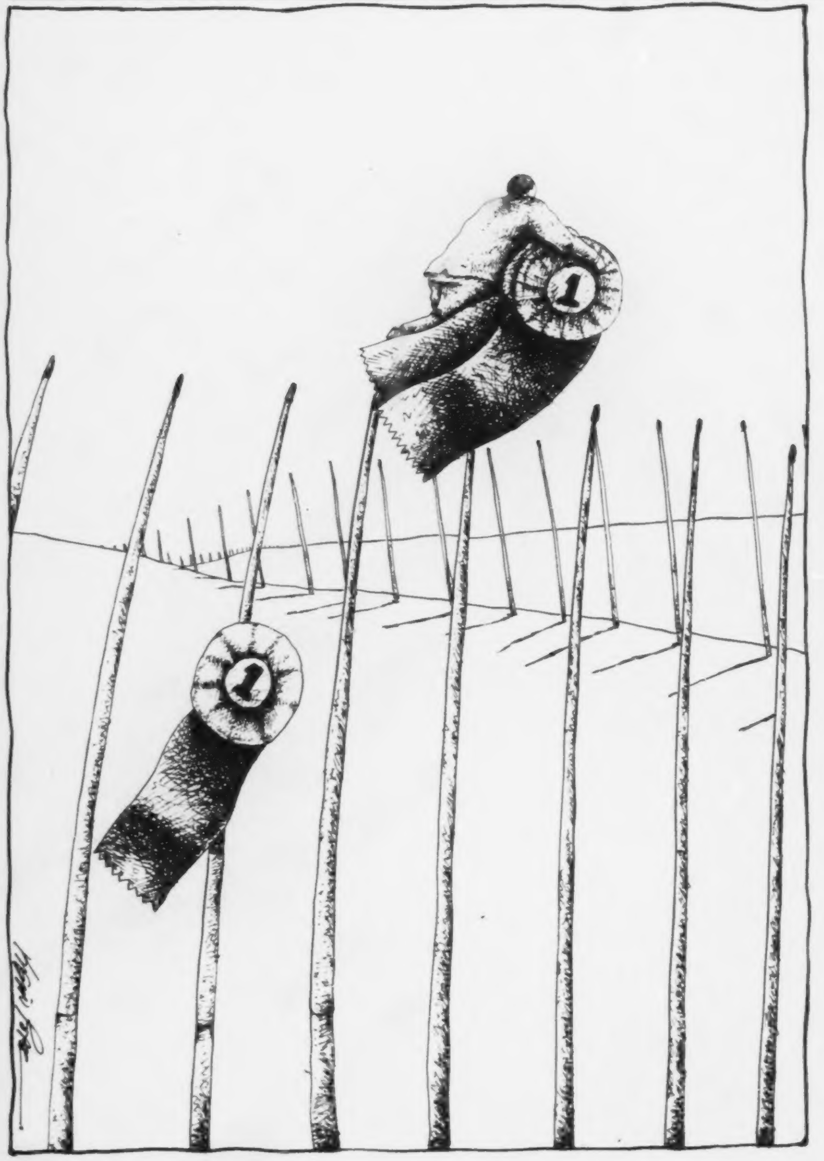
20. Gabriel et al., *Studying the Sustained Achievement*. . . .

21. Maria Calderon and David D. Marsh, "Applying Research on Effective Bilingual Instruction in a Multi-District Inservice Teacher Training Program," paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., 1987. K

SNYDER WEBB

"That's the last time I write an essay about what I did on Halloween."

How Valid Are Principals' Judgments of Teacher Effectiveness?



Not very valid, respond the authors. Consequently, we must find some better way of assessing teacher effectiveness – and soon.

BY DONALD M. MEDLEY
AND HOMER COKER

NEARLY all decisions about teachers' roles stem from judgments of their effectiveness – judgments usually made by principals. Although the question of whether or not these judgments are valid is a natural and important one, it is rarely asked. The validity of principals' judgments of the effectiveness of the teachers they supervise is generally taken for granted.

However, the small number of studies of the validity of principals' judgments (or of ratings based on them) that have been reported in the literature have yielded consistently negative findings. Each such study has concluded that there is no appreciable agreement between principals' judgments of teachers' effectiveness and the amount students learn.[1]

The implications of this conclusion are grave indeed. How can any effort to in-

DONALD M. MEDLEY (University of Virginia Chapter) is professor emeritus at the University of Virginia, Charlottesville. HOMER COKER (West Georgia College Chapter) is director of the Teacher Evaluation Project and a professor of education at Georgia State University, Atlanta.

Illustration by Kevin Pope

crease the effectiveness of schools in promoting learning succeed if questions concerning which teachers are certified, hired, given tenure, and recognized as outstanding depend, not on how effective they are, but on some unknown factor?

Contemplating such a bleak prospect led us to reconsider the question and to design a new study of the validity of principals' judgments.[2] In doing so, we reviewed the studies cited above and discovered a number of common weaknesses in design and instrumentation that might have prevented them from detecting a relationship between principals' judgments and teachers' effectiveness.

One such weakness arises from the necessity of using a sample of teachers drawn from different schools in order to secure enough teachers to allow a relationship to be detected. This means that judgments made by different principals in different schools must be treated as interchangeable, which they almost certainly are not. It also means that the same achievement test must be used to measure student learning in all the schools and that differences in the objectives sought in different schools must be ignored.

Another weakness we discovered in the studies we examined was that the statistical procedures used to estimate the effectiveness of teachers violated important assumptions. Since these studies were reported, it has been shown that, because of a regression artifact, the procedure most commonly used yields distorted estimates of teacher effectiveness.[3] Methodological advances made it possible to design and conduct a study that would have none of these weaknesses – a study that would yield correlations that would not underestimate the relationship between principals' judgments and teachers' effectiveness, as we suspected the earlier studies had done. We decided to conduct such a study.

We selected a sample of 46 elementary school principals who were employed in systems whose testing programs provided suitable data and who were willing to participate in the study. Principals were asked to judge the effectiveness of those teachers under their supervision whom they felt qualified to judge. The principals recorded their judgments of each teacher's performance in three roles: 1) providing learning experiences that result in the acquisition of fundamental knowledge by pupils; 2) providing learning experiences that lead to good citizenship, personal satisfaction, and self-understanding; and 3) acting as a professional colleague of other teachers, supervisors, and administrators.

Our sample contained 87 groups of elementary school teachers, each made up of teachers of the same grade and subject in the same school whose performance had been judged by the same principal. The total number of teachers for whom completed data were available was 322; the total number of principals was 46.

Pretest and posttest scores of students in each teacher's class were obtained on equivalent forms of the reading test and the arithmetic test administered as part of the regular school testing program. A regression equation was derived for each teacher's class in order to predict posttest scores from pretest scores. These equations were then used to obtain an estimate of the posttest score an average student would be expected to achieve in each teacher's class, and this expected score was used as a measure of the effectiveness of the teacher in that class.

Coefficients of correlation were calculated separately for each of the 87 groups of teachers judged by the same principals, so that 87 separate estimates of the validity of principals' judgments were obtained for each of the two subject-matter areas. Table 1 shows the mean correlations across groups and subjects, by grades and by roles judged.

The correlation coefficient in Table 1 that corresponds most closely to those reported in earlier studies is the overall correlation of .20 with performance of Role 1, a value that is in startlingly close agreement with the earlier findings and can only be interpreted as a confirmation of them.

> *The time has come to stop pretending that expert opinions about teacher effectiveness are valid.*

Table 1 also shows that principals' judgments of teachers' performance of different roles are essentially interchangeable. This finding is a further bit of evidence that the principals' judgments have little to do with teachers' effectiveness in promoting student achievement. It seems to us that the time has come to accept this unpleasant fact and to stop pretending that expert opinions about teacher effectiveness are valid.

If we accept what seems to be the inescapable conclusion that principals' judgments of teacher effectiveness have little or nothing to do with achievement gains, then the first question we must ask is, What do principals' ratings measure? Since these ratings tend to be reliable, they must be measuring some stable teacher characteristic. Whatever that characteristic is, it is of critical importance, since it is the actual basis on which teachers in our schools are recruited, selected, promoted, and recognized as meritorious. It is our guess that these ratings reflect mainly the kind of learning environment a teacher creates and the kind of rapport a teacher has with stu-

TABLE 1.

Mean Correlations Between Principals' Judgments of Teacher Effectiveness in Performing Three Teaching Roles and Achievement Gains of Students

Grade	N	Role 1	Role 2	Role 3	Mean
2	30	.20	.13	.03	.12
3	10	.26	.24	.22	.24
4	12	.16	.10	.05	.10
5	16	.23	.22	.25	.23
6	19	.17	.24	.13	.18
Overall	87	.20	.19	.13	.17

dents – both qualities that are universally regarded as desirable. Why principals' ratings do not correlate with achievement gains is an important question for future research.

If the ability of a teacher to provide "learning experiences that result in pupils' acquisition of fundamental knowledge" is regarded as an important criterion on which to evaluate teachers, then we must answer another question: How can we obtain valid assessments of teacher effectiveness for use in day-to-day decisions?

One might ask whether anything can be done to make principals' ratings more responsive to teacher effectiveness. Can principals be trained to be better judges of teacher effectiveness? The strength of the overall impression that a principal (or anyone else, for that matter) forms of the effectiveness of any teacher is so strong that we doubt that any amount of training can overcome it. But the effort is probably worth making.

WE MUST ALSO ask ourselves whether some alternative measure of teacher effectiveness could be used instead of principals' ratings. The alternative most often suggested as a way of assessing teachers is a "teacher competency test." But repeated efforts to establish the validity of such tests as measures of teacher effectiveness have been no more successful than efforts to validate principals' judgments.[4]

A second alternative that is sometimes proposed is the use of achievement gains of students in the teachers' classes as a measure of teacher effectiveness. In addition to being cumbersome and expensive to implement, teacher evaluations based on student gains have been found to be unreliable.[5] They are, in fact, likely to do more harm than good when used for routine teacher evaluation.[6]

Can some alternative measure of effectiveness be used instead of principals' ratings?

A third alternative is measurement-based teacher evaluation, which would base teacher evaluation on records of classroom performance made by observers trained to record behavior without evaluating it. This alternative is the most promising, but it needs – and should be given – further development.[7]

Meanwhile, state legislatures continue to mandate statewide programs to evaluate teachers. A national committee is now beginning to plan a nationwide system of teacher evaluation. These efforts continue in apparent ignorance of the unsolved problems of teacher evaluation. How much longer can we afford to ignore them?

DAVE CARPENTER

"I am a 'substitute' teacher, not a 'second-string' teacher."

---

[1] Arvil S. Barr et al., "The Validity of Certain Instruments Employed in the Measurement of Teaching Ability," in Helen M. Walker, ed., *The Measurement of Teaching Efficiency* (New York: Macmillan, 1935), Ch. 4; Wilbur B. Brookover, "The Relation of Social Factors to Teaching Ability," *Journal of Experimental Education*, vol. 13, 1945, pp. 157-65; A. G. Hellfritsch, "A Factor Analysis of Teacher Abilities," *Journal of Experimental Education*, vol. 14, 1945, pp. 101-34; Ronald D. Jones, "The Prediction of Teaching Efficiency from Objective Measures," *Journal of Experimental Education*, vol. 15, 1946, pp. 85-99; C. V. LaDuke, "The Measurement of Teaching Ability," *Journal of Experimental Education*, vol. 14, 1945, pp. 75-100; Leo J. Lins, "The Prediction of Teaching Efficiency," *Journal of Experimental Education*, vol. 15, 1946, pp. 2-60; H. M. Anderson, "A Study of Certain Criteria of Teaching Effectiveness," *Journal of Experimental Education*, vol. 23, 1954, pp. 41-71; and Donald M. Medley and Harold E. Mitzel, "Some Behavioral Correlates of Teacher Effectiveness," *Journal of Educational Psychology*, vol. 50, 1959, pp. 239-46.

[2] Donald M. Medley and Homer Coker, "The Accuracy of Principals' Judgments of Teacher Performance," *Journal of Educational Research*, March/April 1987, pp. 242-47.

[3] Donald T. Campbell and Albert Erlebacher, "How Regression Artifacts in Quasi-Experimental Evaluations Can Mistakenly Make Compensatory Education Look Harmful," in J. Hellmuth, ed., *The Disadvantaged Child*, Vol. 3 (New York: Breimer/Mazel, 1971).

[4] Arvil S. Barr, "Measurement and Prediction of Teacher Efficiency," *Journal of Experimental Education*, vol. 16, 1948, pp. 203-83; and Thomas J. Quirk, Barbara J. Witten, and Susan F. Weinberg, "Review of Studies of the Concurrent and Predictive Validity of the National Teacher Examination," *Review of Educational Research*, vol. 43, 1973, pp. 89-113.

[5] Jere Brophy, "Stability in Teacher Effectiveness," *American Educational Research Journal*, vol. 10, 1970, pp. 245-52; and Barak Rosenshine, "The Stability of Teacher Effects upon Student Achievement," *Review of Educational Research*, vol. 40, 1970, pp. 647-62.

[6] Robert S. Soar, Homer Coker, and Donald M. Medley, "Teacher Evaluation: A Critique of Currently Used Methods," *Phi Delta Kappan*, December 1983, pp. 239-46.

[7] Donald M. Medley, Homer Coker, and Robert S. Soar, *Measurement-Based Evaluation of Teacher Performance* (New York: Longman, 1984). K